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Agricultural.

MAPLE SUGAR AND SYRUP.

At the Owosso Institute I made an assertion, which I know to be a fact, which is causing me no little trouble, viz.: Maple sugar or syrup from the last run of the season, is just as good as from the first, if we are neat enough and quick enough, so that there is no fermentation or souring of the sap. Many are writing me and asking, "Can this be true." I do not wonder, for a few years ago I myself was sure as was my father before me, that only syrup or sugar from the first runs was "gilt edged." But this is all a mistake. At first everything is sweet and clean and the weather usually cool, hence no sap sours and the syrup is first class. Later the buckets get sour, the weather hot, which hastens fermentation, and the average sugar maker does not exercise the care necessary to a prime article of syrup. The sap is all right, but through mismanagement it sours and the flavor is lost. Absolute sweetness or neatness, and great haste, are very necessary, especially late in the season. But I have demonstrated that with due care the very last syrup of the season is equal to the first, and so of prime quality. That this is true even after buds start I believe, but am not absolutely certain. After the buds start the weather is so warm that it is hard to prevent fermentation. Yet I believe that sap taken from a first tap, even after the buds start, and reduced to syrup before it could sour would be all right. Usually such sap would be vitiated, as the trees have been long tapped and there is enough sour sap about the wound, not to mention spout and bucket, to ruin the product, so that the sugar would not granulate, nor the syrup be fit to eat.

Let me mention a few facts in regard to maple syrup: 1st. A good maple bush is very valuable. 2d. Syrup pays much better than sugar. 3d. Throw away a dozen gallons of poor syrup rather than market one. 4th. Use only tin buckets. Always use a cover to every bucket so as to preclude rain, snow and dirt. Scald bucket and all apparatus often. Use spout so that the bucket can be hung to the tree. Use a Champion evaporator. Never use any but the best seasoned fuel. Work in a neat house, and make all syrup just 11 pounds to the gallon.

The sugar maker's motto should be neatness and despatch, then color and flavor will be faultless. I never sell syrup less than $1 25 per gallon, and I find market with no trouble for more than I can make. Once on a table and the household is captured.

A. J. COOK.

SHORTHORNS FOR MICHIGAN.

C. and J. Ferguson, of Almont, Lapeer Co., recently purchased from J. and W. B. Watts, of Salem, Wellington Co., Ont., a bull and two heifers, all of the Cruickshank blood. The bull, Wellington Starlight, was year old in November last, is by Lord Lansdowne (51601), bred by E. Cruickshank, Scotland; dam, imp. Starlight by Star (32-601); 2nd dam, Ury Lass, by Prince of Warlaby (20593); 3rd dam, Clipper, by Old England (24681); 3rd dam, May Rose, by Master Gunner (22316), tracing to Crocus by 2nd Duke of Northumberland (3646). The heifers are Rose of Summer, by Lord Lansdowne (51601), dam, Village Blossom, bred by A. Cruickshank, which has since dropped a roan bull calf: the other heifer is Sunbeam, by Lord Lansdowne (51601) dam imp. Raspberry 7th, by Young English (31-113). She has had a red bull calf. The Messrs. Ferguson are much pleased with the make up of these animals, and they make a nice addition to their breeding stock.

AN Ohio man who has a mile of hedge fence says he would not give twenty rods of any other kind of fence for the whole of it. It costs too much to trim it, he can raise no grain within fifteen rods of it, and it dies out near the ground so that it won't turn hogs.

NORVELL FARMERS' CLUB.

At the meeting on January 26th R. D. Palmer presented a paper on "The agricultural press." He does not believe in the entire disinterestedness of publishers, that they issue their periodicals solely for the good they may do, but they labor that they may profit thereby. When a farm or business is written up, he used to think he could tell about how much the editor received for it by the degree of praise given. The great growth of the agricultural press in the last 50 years is due to the demand for it, for a means of intelligence on agricultural subjects and a medium through which ideas may be exchanged. That paper is most valuable which encourages farmers to give items ot successful practice and observation. While he believes in doing work well, he criticised the prevalent advice in the papers to "give the land better tillage and care." Additional labor adds to the cost of production, and if the yield is not correspondingly increased there is loss. Notwithstanding what he reads, the farmer must still trust to his judgment and experience for his methods and practice.

In the discussion which followed, H. A. Ladd stated that of 500 periodicals published in Michigan but six were devoted to agriculture, and of these but one was a weekly. The farmers of Michigan ought to support at least one weekly paper devoted to their interests. The papers in a home have much to do in the training of the children, and good agricultural papers will do much to keep the boys on the farm.

S. W. Holmes used to think the advice of the MICHIGAN FARMER as to when to sell the various farm crops the most reliable he ever saw, if taken in a contrary sense. Has not taken the paper for three years, so does not know how it is now. After all, the press has more to do with the making up of the person who reads it than any other one thing. The character of a paper read for a period of years becomes a part of the character of the person reading it.

L. D. Watkins has always taken ten or twelve agricultural papers, and supposed them to be of value to him. If in debt for a farm he would invest ten dollars in agricultural papers, and expect it to pay him as good an interest as any investment he could make. By having many papers together from different parts of the country, we get the experience of the best farmers all over the country. Many articles are on subjects of no interest to us. Those we need not read. Happens to know how the grain and stock market reports that have been spoken of in the MICHIGAN FARMER are made up. On Friday and Saturday Ben. Gibbons attends the stock sales, and reports the transactions just as they occur. Robt. Gibbons goes on the Produce Exchange and reports facts. Advice is very seldom offered. The figures given are just as reliable as those which the members of the Board of Trade have.

President Halladay said that from the market reports we learn the amount of grain in the world, and the probable demand for it. We must form our own opinions as to its value and the time to sell. The reports of meetings, the papers that are given, prepared by specialists on the various subjects, ought to be of value to us.

Wilder Bancroft does not believe a paper equal to a farmers' club as a source of information, and J. P. Merrill thinks that if we lived up to the teachings of the editors we should all become bankrupt.

Other ideas brought out were that we need to read all sides to learn the truth; that in deciding on a plan of action, it is a help to us to have the results of the experience and observation of others; that papers devoted to special departments are multiplying and are most excellent, but there are few or no papers covering the whole field of practice, science, education, literature, art, religion, etc.

At the next meeting at J. B. Halladay's on Feb. 25th, the club will discuss "Hired help."

A. R. P.

SALINE FARMERS' CLUB.

The Club met at the residence of Mr. Geo. W. Shaw, on February 10th. Mr. Shaw's farm consists of 80 acres of choice farming land, situated in the township of York, three miles south of Saline. The Club me at 11 a. m., and was called to order by President Wood. The report of the viewing committee at our last meeting lead to a discussion on housing sheep during the fall, winter and spring months; and it was generally thought that more weight and better quality for manufacture could be obtained by keeping them dry until shorn.

The President's annual address gave us the old proverbs, "There's always room at the top," and "A stitch in time saves nine;" in other words, care for the minute things on the farm. Some hints to our lady members on making life more interesting for their honored lords, were cheered by the same. Essay by Mrs. F. A. Wood, a parody on the past history of our Club, was heartily cheered by all. The Question Box was next opened: "Is Winter dairying profitable?" was discussed pro and con, a majority agreeing that most profit was derived from summer dairying. "Does it pay to feed steers until they are four years old?" was answered by Mr. G. Hurd, that in his experience the demand for heavy cattle had changed, and that a two or three-year-old steer, rightly fed, will bring the most money.

After dinner a select reading was given by Mrs. Charles Cobb, entitled, "The Shiftless Husband," picturing the home of a negligent, shiftless farmer. Then a paper on "Shall we as farmers seek to become specialists?" by Mr. A. A. Wood. This was to the point, an excellent paper, proving his thorough belief in the question. After some discussion of the same the Club adjourned, to meet at Mr. J. Kyte's on the second Friday in March.

The Club have just received a dozen barrels of the Diamond Crystal salt advertised in the FARMER, and are highly pleased with it.

S. R. CRITTENDEN.

FORESTRY.

This is a very prolific source of supply for newspaper articles at present, and we hear the arguments re-iterated that have passed for the truth for lo! these many years. There have been figures to prove that the sources of supply for timber and fuel were limited to the use of the present generation, and then a wail goes up for the woes of posterity. The suggestion that the rainfall is regulated by the amount of timber left standing, has crystalized into a belief with many persons. As if the hand of man could in any way interpose to divert or interfere with the regular operations of the laws of nature! It is quite anomalous that public men should be found who have such an abounding interest in land owners and their prosperous future as to strive to protect them from imminent dangers which have not yet become apparent to them, while the real grievances for which they are constantly petitioning for redress are ignored. If Congress could be induced to appropriate ten thousand dollars for an investigation into the operations of the patent laws upon the interests of farmers, or upon losses incident to a reduction of the tariff on wool, there would be plenty of idle men who would suddenly develop a peculiar aptitude for a commission of inquiry. This annual appropriation of $10,000 by Congress, and from $1,000 to $25,000 by the different states, is a wonderful stimulant to keep alive the fear of impending woes upon which this forestry fabric is built. We are cited to the care which European governments take to preserve their forest lands, and we are asked to reason from analogy that forestry commissioners are needed here as well. But the government there and the individual land-owner here, stand in the same relationship. Each has his kingdom—small or great as the case may be, and he orders the economy of its operations as seems best suited to his interest. If the farmer's crop of trees is mature, it is just as proper to cut it down for the profit there is in it, as it is to cut a mature field of grain, and it needs no "commissioner" to give permission for the one more than for the other. It is quite the proper thing for the land owners of the United States to ask what acceptable service the secretary of the Forestry Commission is performing, n lieu of the money appropriated for his labor, and why it was necessary to import a man, if gathering statistics and suggesting forestry legislation, (which involves the appointment of more "commissioners") are all the results that have as yet come to the surface.

One of the results of Mr. Fernow's investigations is that, outside of Alaska, there are now 490,000,000 acres of forest standing in the United States, which is over eight acres for each man, woman and child. The area of forest lands is increasing in some of the New England States; and under the fostering care of tree claim laws and the interest of individual owners of land in the newer states, it is said that 100,000 square miles of almost treeless prairies have been reforested since their settlement.

The price of any product always indicates its abundance or scarcity, and the fact that lumber does not rise in value in proportion as the "commissioners" proclaim its early extinction is a poor commentary on the value of the knowledge so ostentatiously displayed. It does not need tables of statistics to prove that lumber and timber are cheaper now than ten years ago. The farmer who has a few oak ties to sell finds that 45 cents is the most the railroads will give, while he received 50 cents a few years ago. Entire barn frames can be purchased for $7 per thousand feet that brought $8 to $10 a few years ago. The uses to which wood was formerly put in the construction of machines and implements are now largely supplemented by iron. All the wooden bridges are rebuilt with iron. Not a month ago I saw cords of elm stuff which it was said were to be made into black walnut table legs. Veneers of ornamental woods are used upon the surfaces of the commoner kinds, and woods that are comparatively plenty have become popular for inside work, and are taking the place of timber now becoming scarce. It is said that an acre of thrifty young pines will grow 1,000 feet of timber per year when once established, and that a safe estimate for all growths of thrifty trees is 400 feet per year. And now, if figures can be so used as to produce dismay and consternation for the future of the race, let us see what figures can do to restore confidence in the ability of the future to supply all our wants and needs. Starting on the assumption that Mr. Fernow, the Secretary of the U. S. Forestry Commission, is correct in his estimate of 490,000,000 acres of timber still standing and that 400 feet board measure is a safe estimate of yearly growth, there will 3,266 feet of timber grown every year perpetually for every man, woman and child of the present population of 60 millions, or over 16,000 feet for every family; beside the mature timber, which, at 5,000 feet per acre, will give over 40,000 feet for every person in the United States, outside of Alaska. Here is a vast surplus, even though the population should increase in a greater ratio than in the past generation, and the contemplation of it ought to allay any forebodings of future want. I think people are coming to a more sensible view of the situation. As long as I can remember, it has been considered a sort of vandalism to cut down timber on the farm wood lot. The fallen or decayed trees only were used for fuel, or an attempt made to utilize them for timber after they were spoiled for the purpose. There was no attempt to improve on nature's way of thinning, which was to grow young timber only so fast as the old trees fell at maturity. Every mature tree should be cut down and sold, or utilized for some of the farm needs, and give the vigorous ones and the young growth, a better opportunity. The axe is to the forest what the plow is to the field—a cultivator, intended to promote growth, and when the growth is ripened use it or sell it. What kind of a farmer would he be who kept his grain until it became mouldy before feeding, or let the rats eat it up before raising more, and yet the timber lot is often used in the same way under the delusion of a plaintive sentiment. "Woodman, spare that tree" has been the cause of more dry rot and destruction of valuable timber than the vandalism so much complained of. Let farmers use only common sense in managing the timber lot, and let the "commissioners" use up the present "appropriation," but see to it that no more of the public fund goes to spread a delusive sentiment, or to the gathering of statistics which is the duty of officers already employed.

A. C. G.

SILOS AND ENSILAGE.

The West Michigan Farmers' Club continued its discussion on the above subject at its last meeting. The members had evidently been carefully studying and considering the matter, and evinced a disposition to credit the new feed with "all there is in it." S. S. Bailey opened the discussion by saying he had heretofore been a doubter, adding:

"But I have studied the practical experience of men who have made and fed ensilage, and I begin to think that possibly my error has been that I have not taken into consideration the fact that there is any great difference in assimilable qualities of food. Dry fodder, even if eaten with avidity, may not be utilized in the system of the animal as thoroughly as if in a fresh state, like the product of the silo. There is no difference in nutritive qualities between good hay and hay that has been damaged by getting wet—*i. e.*, by analysis you will find that damaged hay contains exactly the same chemical elements of nutriment as the other; but when you feed it you can only get one-half as much benefit from it, because it is only half as digestible as the good hay. So it is found in the case of those who feed ensilage. They get an increased quantity of milk, and this shows that the silo-preserved fodder is more digestible than other fodder. I supposed at first this was so because ensilage feeders took better care of their cattle than others—were more careful to batten up their barns and curry the animals. But I am convinced now."

Mr. Bailey then read Prof. Cook's practical experience with a silo, as published in the FARMER recently

C. W. Garfield related his observations during a trip to Wisconsin, saying hundreds of silos were built in that State last year, and thousands of cattle are being fed on ensilage this winter. The people there are fully awakened to the importance of this new feature of dairying, believing it their only hope to compete with western ranchmen who steal their pasturage. Mr. Garfield said: "The Burrell and Whitman ensilage corn is very generally planted, and the model method of planting is a kernel once in eight inches and the rows ordinary width apart. It is expensive hauling so great a weight of fodder when green, but the healthfulness of the food, the entire lack of waste and the wholesomeness of the product amply compensated for the outlay of labor. A large winter dairyman, using ensilage, said he could make as fair an article of butter at Christmas as in June upon the best of blue grass pastures. This method of intensive farming, making an acre of ground carry three or four times the stock fed under ordinary methods, is certainly worthy of careful consideration. It is not a fancy farmer's device that costs two dollars for every one returned. It is a scheme to reduce the expenses of the farm, carrying more cattle and securing a larger income."

Mr. Van Buren said: "I visited the Sweet farm with other members of this Club, and observed ensilage fed cattle carefully, and their droppings. I did not think they were healthy cattle; they did not look right, and were too loose. I don't believe the ensilage is good feed."

To this Mr. Garfield replied: "I talked just that way myself five years ago, and I was convinced that it was a failure when I read of the condensed milk factories being shut down because the poison in the milk was found to exist in the manufactured article. But there is a difference between sweet and sour ensilage, and all injury is removed after it has once been through the heating process."

[The condensed milk factories refused to accept milk from ensilage-fed cows because, when experiments were first made with ensilage, the cows were fed entirely upon it and milk from cows thus fed could not be condensed, owing to the presence of an acid which kept it in a whey-like condition. The term "sweet ensilage" is a misnomer; the distinction between "sweet" and "sour" does not exist. There is no ensilage without fermentation, which exists in greater or less degree according to its preservation, or the more or less perfect exclusion of air from the silo. The greater the quantity of moisture in the fodder ensilaged the greater the fermentation in the silo. When the silo is filled slowly, or the fodder partially wilted or cured, the fermentation is less. Ensilage is not a perfect food. Its early advocates claimed too much for it; but now its true use in the economy of feeding is better understood; and it is used in connection with grains or mill feed, taking its proper rank as a cheap ration, and has evidently "come to stay." —ED.]

A Good Showing for the Shropshire.

HOWELL, Feb. 21, 1888.

To the Editor of the Michigan Farmer.

As the production of mutton is receiving considerable attention by the farmers of this country, permit me to report the weight and growth of a registered Shropshire ram lamb. On Oct. 1st I sold to Chas. B. Grove, of Laingsburg, Mich., a ram lamb known and recorded as Improvement No. 4845, dropped April 20th, 1887. With moderate feed until date of sale he weighed 100 lbs., and on Jan. 1st, after doing considerable service in Mr. Grove's flock, he again tipped the beam at 170 lbs. Now, Mr. Editor, when the people of the United States are looking for a breed of sheep adapted to its varied climate of wet and dry, cold and heat, its cyclones and blizzards, and what is still worse, the assaults of free-trade raw-material presidents, the Shropshire recommends itself.

R. R. SMITH.

PRACTICAL TALK ON SHORTHORNS.

[A Paper Read by John Dimon, of Detroit, at the Annual Meeting of the Eastern Michigan Shorthorn Association.]

Mr. President and Gentlemen—The practice of having speakers at our State and County Fairs and at breeders' meetings as at all other meetings wherein the farmer and breeder are interested, is a good one, provided the speaker has something to say which will enlighten and interest his audience. But if he has no other mission than that of airing his eloquence and panegyrizing agriculture and the farmers, the practice is, I think, a poor one. Last September we listened a solid hour and a half to the sonorous voice of a great public official, the burden of whose remarks was that "agriculture was a big thing." "You farmers are all patriots of the grandest and most heroic type," etc., etc. Such is a very poor errand to bring a man upon the stage at such meetings. Whoever essays to speak upon such occasions should have something to say for the instruction of those who listen. I could tell you that agriculture is the basis of the wealth, power and prosperity of the American people; and also the leading and essential business of the nation, employing more than three-fourths of our adult population; and that it is really the groundwork of civilized society and the basis of all progress. But I came here to give you a practical talk on Shorthorns, and wish to make my subject both brief and to the point.

SUCCESS IN BREEDING.

There are but few men who meet with the highest success in breeding and stock raising, for the simple reason that there are very few who study the nature, habits and comforts of animals sufficiently to understand their requirements and provide for them. No breeder or farmer can expect to succeed in handling stock, who does not possess inclination or taste for studying their habits, and is kindly enough inclined to make them comfortable at any trouble or expense.

MAN'S BEST SERVITOR.

I once wrote a live stock journal that the old cow was the mother of all our beef, and that in the household she catches the wolf on her horns and tosses him from the door. She has turned the tide of our agricultural prosperity, in many parts of the country, from a downward course, in raising grain, to an upward one in stock, grain and hay. Flowers and grass form beneath her feet on the most barren soils. But the old cow does not stop to enthuse over them but converts them into good solid hard cash.

My experience and observation teach me that the greatest profits in farming are made by raising good stock under good management, and the greatest losses are sustained by raising poor stock under bad management. Vail, the cattle king of Nevada, commenced business, it is said, with a capital of $550, and invested the whole amount in a Shorthorn cow, from which he has sold $40,000 worth of increase.

SELECTING THE BULL.

It should ever be born in mind that the bull is half the herd, and the breeder cannot be too particular in making his selection. First, decide on the type, quality, disposition and color (as well as the tribe and family) you wish to breed, then select, if possible, the bull possessing all these combined qualities. My experience as a breeder proves to me that the offspring of all sires, as a rule, from man down (or up) is more likely to resemble the dam of that sire in its general characteristics than any other relative (back of its own parents) in said family or breed. Hence the importance of selecting your bull from a good stock cow. And right here is where the old cow comes in again for her share in the business; and that after having admitted the bull to be half the herd.

BREED ONLY THE BEST.

Far too long have many of the breeders of Shorthorns contented themselves with such cattle as they could secure at a moderate price and thereby made a great mistake. A herd of such animals will consume as much valuable food per head as one worth three times as much, and will cost just as much in every other respect for care and handling. It will therefore be seen at a glance that one man having a herd of 25, another a herd of 75, both herds being worth the same money, one has immensely the advantage over the other. In other departments of farm enterprise, men seek the best seeds and the best trees; the best roots and the best machinery, because they realize that by and from these they secure the most profitable returns. And so it is with the horse, the cattle, the sheep, the swine and the poultry, only more so. One buys a stallion worth $5,000 because he knows he will command the most mares at the highest price; a bull costing $500 to $5,000 because his get from cows of similar value will command proportionate prices, and the keep and care of the one does not exceed that of the other.

SHORTHORN TRIBES AND FAMILIES.

I first divide them into tribes, then subdivide into families. The Shorthorn tribes at present consist of the Bates, Booth, Princess and Cruickshank. The families of Shorthorns bearing the highest merits and cash value at present, according to best authority, governed by sales in both America and England, are as follows: 1st, Duchess; 2d, Oxford; 3d, Wild Eyes, Kirklevington, Barrington and Princess, (including Constance and Lady Sale families), 4th, Craggs, Waterloo, Thorndale or Cambridge Rose, and Rose of Sharon families; 5th, Moss Rose, Gwynne, Red Rose, Phyllis and Butterfly families, etc. The Cruickshank family, of Scotland, originated by Mr. Cruickshank, and composed of both Bates and Booth cattle, is a useful tribe or family, and very popular in the show rings; and has many staunch friends among the breeders of Shorthorns in Ontario, Canada.

COLORS OF SHORTHORNS.

The colors belonging to this breed are as follows: Red, red and white, roan, and white. The most desirable color, at this period, in the United States, being red or as near clear red as possible; while white is by far the most undesirable color. But just across the border in Ontario a rich roan is quite as highly prized as a red, and I notice at their fairs the roan takes the lion's share of the prizes, and at Bow Park, which is said to be the greatest Shorthorn breeding establishment in the world, I notice that the roan Duke bull, fourth Duke of Clarence, now dead, which so long stood at the head of said herd, is succeeded by another roan bull, imp. Duke of Leicester; while in England I notice the highest premiums often go to roan, and even pure white cattle. Consequently, color, after all, seems to be a secondary consideration in a really good animal. My 35 years' experience with animals also convinces me that the fashions in colors of cattle are somewhat subject to changes. It is an old saying a good horse is never of a bad color; and it may apply to cattle as well.

MARKING OFFSPRING.

The influence of mental impressions of the parents at the time of service as regards the marking of the offspring seems to have been quite well understood by our common ancestor Jacob, more than 2,000 years ago, who, it seems, was shrewd enough to profit by his knowledge of the facts. This fact of the coloring or marking of offspring at time of service has, I believe, generally been credited to the dam and not to the sire, by breeders in this country. Now, while I am willing to give the dam all credit that belongs to her in this matter, and while I do not wish to be called a crank, or considered unreasonable in my views, I am inclined to think that the influence of mental impression on the male at time of service, has its effect on the offspring also; and that its effect extends more or less to all animals. In Switzerland you will find the cattle all brown in one canton, all grey in another; and it is said that no bull is allowed to serve a cow which differs in color from the herd to which he belongs, as the Swiss stock breeder religiously believes that such intercourse would affect the color of the subsequent get. And indeed such has been proved beyond a doubt. A breeder of Jerseys in this country says: "On the 20th of August, 1875, my Jersey bull Lord Lawrence, solid color without a white hair, (his dam, Lady Mary, also solid gray) served a cow of broken color. An hour or so later he served imp. Blondette, a solid fawn whose calves had always been of uniform solid color with dark points. On May 28th the first named cow dropped a heifer calf solid color, and an hour later Blondette calved a bull calf flecked with white like the cow mentioned." Question: Could a mental impression received by the bull from the first cow have been transmitted to the calf of the second? Is there a herd-witch who mingles

"Fawn spirits and white
Dark spirits and gray,
Mingle, mingle, mingle,
You that mingle may."

In my experience as breeder of Ayrshire cattle I once owned a noted stock bull, Prince Arthur, whose ears were notched naturally and whose calves were invariably thus marked. This mark was an old herd ear-mark in Scotland where these animals formerly came from, and was naturally retained in the herd for several generations. Can any gentleman present explain the phenomenon? Did time permit I could mention several very marked cases of the marking of offspring by the mental impression of the dam, both at time of conception and afterwards.

BREEDING FOR PROFIT.

In breeding Shorthorns (as before hinted) much depends on laying your foundation. Therefore you cannot be too careful in your selection of animals of individual merit, holding fast to the principle that like begets like, and that only good qualities are worth perpetuating.

CONSTITUTIONAL SOUNDNESS.

Discard as breeders all consumptive animals, as it cannot be expected in the natural order of things, that you can grow sound and healthy animals from unsound parents. Select animals for breeders of strong and untainted constitutions; for without this all other merits are of very uncertain value, because where the constitution is feeble or unsound, the health and the very life of the animal are in jeopardy, and the selling value of the choicest of a herd may drop from the breeder's to the butcher's, or even the renderer's price. A constitution may be perfectly free from disease, either active or inactive, apparent or latent, and yet may be weak.

There may be a tendency to disease where no disease is apparent. Hence we cannot be too particular in selecting animals of the very best constitutions as the foundations of all herds.

CROPS AND TWISTS.

These are two quite important points to look to in selecting animals with which to found a Shorthorn herd. The meaning of the word "crops," as applied to cattle, is a technical name for that part of the body immediately behind the shoulders, on either side of the "chine" or back bone. In a perfectly developed fat animal a cord laid along the side would touch the shoulder, crops and side; but the cases in which the crops are sufficiently developed for this are rare. Lack of fullness in the crops is a fault with a good many Shorthorns. A projecting shoulder, or unusual spread of the middle ribs, may make an animal appear light in the crops, when they are in fact well filled out. The word "twist" as applied to cattle, is used to describe the union of the thighs. In a well formed fat steer the thighs do not separate for a long distance below the tail, and the line of union will be almost as far back as the buttocks. In a thin-fleshed, ill-formed steer there may be a great hollow here. Sometimes such an animal is extravagantly described as "split up to the tail." The former is good, the latter bad in the "twist."

FEEDING ANIMALS.

Overfeeding and underfeeding are the two great evils which the successful stockman must avoid. Overfeeding produces indigestion, inaction of the stomach and their attendant evils, and often causes the premature death of fattening animals and animals fed for the show ring, or permanently injures them for breeding purposes. Underfeeding, on the other hand, produces evils of the opposite extreme, but none the less baneful in their effects. Undersized and unprofitable animals that have not paid for the little food they were allowed to consume, because it was required to support their life and not to make growth, are its most common effects, as shown on many farms where better things would be expected. There is a medium in feeding which every breeder should try to follow. It gives to each animal just what its system can readily assimilate and make use of, no more no less, and none can say but that it is the better way.

COMPETENT AND INCOMPETENT HERDSMEN.

To properly understand the management and feeding of a herd of cattle is a science attained by but a few men, and when such a man is found, if temperate and reliable, he should be entitled to receive the highest wages paid for skilled labor. Such men are more rare than laborers in any other profession with which I am acquainted. While on the other hand there are plenty of men who know all about stock (letting them tell it) who are perhaps sailors or tramps in summer and will work in a barn in winter feeding and caring for stock because it gives them a home. And as they will "put in the winter" at low wages (not cheap), they are given "a job" while the natural or professional herdsman is driven to the city to seek employment at something perhaps for which he is entirely unfitted, and so the world goes; the stock suffers and the breeder has the blues. Once, while managing a large stock farm, being in need of a herdsman, and having an application from a party who told in whose employ he had been, I inquired of his past employer as to his character and ability to act in the capacity of herdsman of choice stock. "Well," said the old gentleman, "as far as I know his character is well enough, but as to ability, I know by dear bought experience that he is *rank poison* to live stock." I am sorry to believe the woods are full of just such men to-day.

Now in conclusion, gentlemen, allow me to say that I did not come here to teach you the business of breeding, managing and feeding Shorthorns, but merely to give you, as I announced at the commencement, a practical talk on the subject, and throw out a few hints which may lead to discussion and possibly set breeders and feeders thinking as to whether they are pursuing the best course as to the management of their cattle.

And now, if you will kindly pardon the assumption, I would like to give on my own authority this advice to beginners in breeding Shorthorns: Start right. As David Crockett used to say, "Be sure you are right; then go ahead." Don't try to start with too many cattle. Unless you have barrels of money, start with just a few good ones. If your means are quite limited, start with one, as did Vail; but be sure she is a good one and sound. Then take good care and manage intelligently and you will succeed. To old breeders I will simply say, some of you

Know the right and approve it too,
Know the wrong, and yet the wrong pursue.

Mind you, I did not say all, only some. But really, gentlemen, many herds of this State, of this country, and to use a western phrase, "all over," need a thorough weeding out. And, gentlemen, you cannot, in my humble opinion, commence any too soon. Commence at the tail end of the herd and don't stop culling until you find what suits you, and whose produce will suit your customers, if it takes half the herd or more. Go thorough in this if it takes the whole. Better rub out and begin anew than keep on the downward course you are now on. What will you do with the culls or weeds? Well, you will always find some ready to buy them. Fools are not all dead yet. If no other way presents, shove your season's crop through them and let the butchers take them at beef prices. Better do that than worse. Keep only good stock; give them good care, and you must succeed.

Dehorning.

ST. JOHNS, Feb. 20, 1888.

To the Editor of the Michigan Farmer.

Will some of your numerous subscribers give the method of dehorning cattle? Also state if there is any particular time of year or age of stock that it should be done.

J. Q. PIERCE.

THE Kansas *Farmer* thinks good sorghum cane worth more than two dollars a ton to the sugar makers. Unless farmers can get more than this they cannot afford to raise the cane, as a corn crop would return them a larger profit. They must retain the sorghum seed, and sell the topped cane at the present price of the untopped, viz., two dollars per ton, to make the crop as profitable as corn.

The spring term of the Agricultural College opened last week with a good attendance of students.

The Horse.

HANDLING VICIOUS HORSES.

Detroit has recently been visited by "Professor" Gleason, who makes a business of taming and training and breaking vicious horses so as to make them manageable. His method is the one used by Rarey and other "horse tamers," and has been known to the profession for centuries. Prof. Gleason, however, having good nerves, splendid physical powers and a strong will, is more an usually successful in putting the system into practice, and impressed his audiences with the success which attended him in subduing several vicious and intractable animals. To make the cure complete, however, we think it would be necessary to go through the operation a number of times. In the last issue of the *American Cultivator* Mr. E. B. Buxton, of Orono, Maine, gives some suggestions on this subject which our readers may find of practical use if they are ever so unlucky as to have a vicious horse. Here is what he recommends:

"Viciousness, in nearly all cases, when shown by horses, results from a desire for revenge or defence. If a person once gets the good will of a vicious horse, it will be found that the animal will be very careful not to hurt him, and will sometime risk life and limb to save him. Last fall I traded for a very fine mare, seven years old, sound, very fine action, and said to be by Ledo, out of a Morgan mare. She cost me about $60, and was the worst kicker I ever saw. She would bite and strike and go over backwards, and I could not put my hand on her withers, or anywhere behind them, but she would squeal and kick. She is now as kind as any horse and will call for me whenever she sees or hears me. I can drive her in anything. My brother is now using her by the side of another, yarding logs. She is as true as steel and plays no tricks.

"The rig I used on her consisted of a ¾-inch, or in sailor parlance, a 2¼-inch line, made fast to her under jaw (persuader fashion), passed back between the forward legs and fastened to a small pulley that would carry the same sized line. I then passed the other line back through the block to fetters on each hind foot. She tried to kick but once, and then the recoil was so great that she did not get square on her legs until she had backed about thirty feet. The fetters should be covered with sheepskin to prevent chafing. After a day or two they can be moved up above the hocks. A horse can travel and work quite well in this rig.

"Balky horses are generally in a nervous fit, and in many, if not all, cases cannot move until the spell is broken. Sometimes a line above each knee, pulled forward alternately, will cause the horse to start forward. Another method is to press forward and down with the thumb nail between the ears. This strikes a very sensitive spot and will often start a very balky horse. A method which I never knew to fail is the following: Take a chain, pass it around the body back of the withers, and make the two ends fast. Run a stout stick through the chain on the near side, about midway, and begin to twist. Do not be afraid, for there is no danger of injuring the horse. Have a loop on either end of the stick, and when the horse begins to get pretty nervous hang one of the loops over the top of the hame, and ask him to start. If he does not start, take another half-turn, and so continue, making it a little tighter every time he refuses to go. When he does start, let the twister fly out and be careful not to let him go too far."

The Importance of Breeding from Producing Dams.

In a recent communication to the Lewiston, Me., *Journal*, Dr. George H. Bailey, State Veterinary Surgeon, says:

"The importance of good, sound, well-bred brood mares as a factor in the breeding problem, has asserted itself so often and so unmistakably in the list referred to, that no prudent breeder will care to ignore the lessons of the past in his future ventures in this direction, and his selections of the maternal parentage of his produce will be as carefully attended to as that of the sires he should patronize.

"Take the lesson home to our own State and see what one brood mare, Gretchen, the property of Mr. Nelson, has done for Maine. I maintain that she is the foundation of all his success and prosperity in breeding that class of phenomenal youngsters that have already placed him in the front rank of New England breeders. Gretchen is the dam of Nelson, three-year-old record of 2:26¾, five-year-old record of 2:21¾; Susie Owen 2:26; Knox Girl, trial 2:28½, and the younger members of her great family are of equal promise. Knox Girl, also the dam Aubine, a very fast filly, record 2:27¼, showing that the family breed on. Gretchen is by Gideon, one of the best sons of Hambletonian, who is also the sire of that other great brood mare, Skip, dam of Independence, and Mr. Drake's fast stallion Glenarm. I have heard it asserted that Nelson was not fashionably bred, but such young sires as he will make themselves fashionable, if breeding behind performances is of any value in making up our estimate of the horse.

"Mr. Nelson was recently offered $1,000 for the use of Gretchen for a single season by a prominent Kentucky breeder. This is a good illustration of the value the Kentuckian places on producing dams. In this connection I would call attention to the fact that Mr. Elizer Smith, of Lee, Mass., the owner of Alcantara, has paid $2,500 a year for the past two seasons for the use of Alma Mater, and Mr. John S. Clark, who recently bought in Kentucky the fast yearling filly Sadie D., 2:35¾, for which he paid $5,000, offered the Talbot estate, who now owns that famous brood mare, $2,500 a year for her services as long as she lived. History repeats itself. Kentucky breeders have adopted the proverb of the Arabs, so old that it has almost been lost in the twilight of antiquity, maintaining that the mare is the vase in which the germ was nourished and developed. We have in Maine a grand lot of brood mares, but many of them have been bred 'in-and-in' to the Knoxes, Morrills and Patchens, until the 'cold blood' rises to the surface when their produce engage in the 'battles of the turf,' and the judge's stand is always too far away at the finish.

"We need an infusion of some of the 'hot blood' of Kentucky, and we are getting it through the well-bred young sires we have recently imported from that famous State, where they have the foundation laid for trotters, upon crosses of thoroughbred blood that never tire or quit."

Change of Rules.

At the recent meeting of the National Trotting Association, the committee on revision of the rules reported the following changes in the rules, which were adopted:

"Rule 6, Sec. 3, was amended so that the pedigree of any horse entered in the race must be given or declared to be unknown, as well as the description, otherwise the animal shall not be allowed to start. Sec. 4 of same rule allows change of name for a horse that has been entered but has not started in a race. This change also applies to Sec. 7 of the same rule.

"Rule 7, Sec. 1, was amended so that false entries shall be ruled out, instead of leaving it optional with the track.

"Rule 9, governing 'walk-overs,' was amended to read that added money in stakes shall not be considered as part of the stake.

Rule 11, governing match races, was extended, so that parties who refuse to abide by the rulings of the judges or the Board of Review shall be disqualified with horses.

"Rule 16, Sec. 1, is amended so that protests may be made at any time before the winnings are paid over.

Rule 20, Sec. 2, is amended so that horses shall not be distanced, but shall be ruled out, where the cause is foul driving or fraud on the part of the driver.

"Rule 28 is so altered that tracks may require drivers or riders to wear such colors or numbers as they may provide to designate each horse. Sec. 7 of the same rule was changed so that a substitute driver shall be paid not less than ten nor more than fifty per cent of the money awarded to the horse.

Rule 33, Sec. 5, was enlarged to allow judges to permit horses other than those called for in a race to remain on the track.

"Rule 41, Sec. 2, covering suppression of time, was extended to declare that time not given out by any track, whether a member of the Association or otherwise, shall be considered as suppressed.

"Rule 54 was amended to the effect that races for three-year-olds and under shall be mile heats, best two in three.

"Rule 61, governing horses sold with their engagements, is amended so that all responsibility for such engagements, devolves upon the buyer."

Horse Gossip.

England pays yearly about $5,000,000 for general utility horseflesh.

Milwaukee will hold a trotting meeting June 25-28. There will be ten purses of $1,000 each.

Carl. Holtslander, of Flint, has sold to Mr. Godfrey, of Parma, a young stallion by Louis Napoleon, for $1,000.

The National Trotting Association now has a membership of 203, of which number 185 were represented at the late meeting.

The courts at Lexington, Ky., have been making it hot for pool-sellers and bookmakers. Last week in the Circuit Court, N. T. Cheek & Co. were fined $3,000, Davidson & Seelbach and D. L. Hardesty, $1,000 each.

Hart Cornell, of Romeo, has purchased of Blair Bros. & Curry, Aurora, Ill., the imported Cleveland Bay stallion, Prince Leopold. He stands 16½ hands high, weighs 1,300 lbs., and is said to be a very fine animal.

Sutherland & Benjamin, of East Saginaw, have recently purchased at Flint, a very promising five-year-old bay mare by Louis Napoleon; dam by Mambrino Gift; 2d dam by Albert Draper, thoroughbred. She will be used as a brood mare.

According to the report of the treasurer the receipts of the National Trotting Association for 1887 were $15,699.27, against $24,679.61 for 1886. It was stated that the decreased receipts resulted from the formation of the American Association.

Dr. S. A. DuPaul, of Carleton, Monroe County, owns a pony which he calls Bony Fearnot, that is 23 years of age and weighs 680 pounds. The doctor made a bet with H. C. Talbot, of Carleton, that he could drive the pony to Flat Rock and back in 60 minutes, 15 miles for the round trip. He made the distance in 52 minutes.—*Saline Observer.*

A late cablegram from England states that at the great Nottingham horse show the first prize for thoroughbred hunting stallions was awarded to the Kentucky-bred stallion Blue Grass. The dispatch says: "Blue Grass remains a great big handsome horse; though thin in the thighs, he is a most commendable animal in every way."

California has a number of the most noted trotting stallions in existence, and it is therefore not to be wondered at that she is taking the lead in breeding sensational trotters. Among others are the following: Guy Wilkes, 2:15¼; Anteeo, 2:16¼; Director, 2:17; Stamboul, 2:17½; Sable Wilkes, 2:18; Woodnut, 2:19¼; Dawn, 2:19½; Antevolo, 2:16¼; Ansel, 2:20; Albert W., 2:20; Palo Alto, 2:20¼; Mount Vernon, 2:21, and Menlo, 2:21½.

Mr. Oscar Field, the well-known Chicago horseman, and proprietor of the Leland House stables, died at his residence in the Pullman Building on Monday last, from the effects of a surgical operation performed on Sunday. Mr. Field was 51 years of age, was a native of Adrian, this State, and from his youth had taken a great interest in horses and horse-breeding.

Trotters seldom go to Europe and are brought back, but this is the case with War lock, bay horse, foaled 1880, by Belmont, dam Waterwitch, by Pilot Jr., and full brother to Viking. He was sold to England some time ago, and now, induced by the growing form of Viking, Mr. John E. Madden, of Bethlehem, Pa., has made the trip across the Atlantic, bought him, and relanded him on these shores.

Mr. C. W. Horton, of Pontiac, has recently brought into this State, and placed upon his farm near Birmingham Corners, two fine stallions. One of these is the imported Cleveland Bay, Eber, now four years old, standing 16 hands high, good bone and fine action, and weighing from 1,300 to 1,500 lbs. The other is the Clydesdale stallion Norseman, 16 hands one inch, weighing 1,500 lbs., and a solid bay in color. Mr. Horton intends keeping them on his farm for service.

It seems that in the item about the horses owned by Mr. Orrin Burkhardt, of Lima, Washtenaw County, the ages given were wrong. One of them is a Cleveland Bay mare, two years and eight months old, and weighing 1,336 lbs. The other is a Percheron stallion colt only four months old, but which pulls down the scale at 595 lbs. It will be seen that Mr. Burkhardt is going to try and breed some good horses.

The Farm.

Succulent Food for Stock.

Sir J. B. Lawes, discussing the above question, says, in the *Agricultural Gazette:*

"Professor Wallace, in a late lecture on cattle-feeding, spoke of the great importance of succulent food, such being the natural food of cattle; and he pointed out that one of the strongest arguments in favor of silage was that it furnished a succulent food, as a substitute for roots, when that crop could not be profitably grown. He also remarked that by soaking dry food in hot water much of the qualities of succulent food could be imparted to it.

"In making these observation Professor Wallace expressed opinions which are generally held by all practical farmers. The question I am about to ask is, whether we have quite such clear evidence in regard to the great superiority of succulent over dry food of the same quality? It will be said at once, in answer to the above question, that you have only to turn an animal into a good fattening pasture and to feed another with the hay taken from the same pasture to prove the superiority of the former. I am quite prepared to grant that the hay would be inferior in its feeding properties to the grass, but the hay would be also very inferior in its food properties to the grass, and to carry out the experiment upon equal terms grass must be cut day by day throughout the season and made into hay.

"We have already analyzed the grass as it is cropped by an ox, and we find that it contains much more digestible substances than hay. Again, it will be said: Look at roots, what excellent food they are. Quite true, but roots contain little indigestible matter, and if dried and ground into meal they would still be an excellent food. Whether they would possess equal properties to the succulent roots is the point upon which I am seeking information. One of the largest and also the most important food ingredients in roots is sugar, and sugar is perfectly digestible in its dry state.

"It is by no means clear to us that silage grass will produce more meat than the same grass made into hay; and we are preparing to carry out some experiments this winter to ascertain the relative feeding properties of these two substances.

"Experiments upon cooked or uncooked foods do not show any clear evidence in favor of the former; and although we hear from time to time of steaming, and other modes of converting dry food into succulent food, still the process has never become popular among practical farmers. A short time ago we published some experiments where oxen were fed with oats and straw as it grew in the field, cut into chaff and given with a small quantity of cotton-cake. Their rate of increase was one pound to every nine pounds of dry food consumed; this is equal to our results obtained when oxen were fed on swedes, clover, hay and cake.

"In the production of milk, and more especially when quantity rather than quality was the object to be attained, I should certainly think that succulent food would have an advantage over dry food. At the same time I should very much like to see a careful experiment tried with the two foods and the result measured by the amount of butter-fat produced. Pigs fed on dry food stirred up in cold water can produce a greater amount of increase upon a given weight of food than can be obtained by oxen or sheep upon succulent food, and it is known that oil, starch, sugar and digestible cellulose are rapidly digested by animals when used in a dry state.

"In making these remarks I do not wish it to be thought that my opinion is adverse to succulent food. I merely wish to draw attention to the subject, which is at the present time of some importance, on account of the arguments used in favor of ensilage. All the evidence up to the present time points to a considerable loss of food materials during fermentation, and at the same time there is no proof that food is formed in the silo from substances which are not food."

Clover for Swine.

A. E. Morse made an address before the Kansas State Board of Agriculture in January, in which he detailed his experience in making pork on clover:

My business is breeding thoroughbred stock. Hogs and cattle, such as are fed for slaughter, are the culls left from the sale of breeding stock, but always above the average, and of such quality as to command top prices.

My method in the production of hogs has been to get as much as possible out of the clover fields, giving at all times a light feed of bran and shorts in slop twice a day, and as the pasture dried up in the fall to add to the bran a shorts ration and fill in with corn, increasing the corn ration as cold weather comes on. During the heat of summer an abundance of pure water is furnished, and salt is given as regularly as to cattle.

This manner of feeding has brought admirable results in rapid growth and superior qualitity of product, making pigs of 200 pounds weight at six months; 300 pounds at nine months; 350 to 400 at one year, and going to 500 pounds and 600 pounds as they near two years of age; while the pigs slaughtered for home use have given the best evidence that the quality of the product was prime.

During the just past season, by reason of short crops and close times, I have depended upon the clover more than ever before, cutting the daily ration of bran and shorts to not more than one and one-half pounds to a hog, and only using corn to finish off with, excepting light feeding of sweet corn in September. There has been something lost on the weights, but on the whole, results have been gratifying.

Among the hogs fed last season were three pigs left from a March litter. All were fed in the way indicated. One of these pigs was slaughtered in December, when nine months old, and dressed out when cooled, 210 pounds. It was cut through the neck, heart and loins to show sections, as was done by Prof. Henry in his experiment, and a close comparison made with the cuts sent out to illustrate his protein-fed pig. The comparison showed that the Kansas pig, weighing twenty-two and one-half pounds more dressed weight, had as great a proportion of lean meat. All the internal organs were in a most healthful condition and the blood was abundant. Of course none of these nice tests which made Prof. Henry's experiments so interesting were attempted, but sufficiently thorough comparisons were made, coupled with the table test of the quality of the flesh, to warrant the assertion that this pig was of the kind from which fancy hams and breakfast bacon could be made.

The live weight could not have been less than 250 pounds; his market value $11 50; he had consumed not to exceed six bushels of corn, at 30 cents, and 400 pounds of bran and shorts at $10 per ton, making a cost of $3 80 for feed, leaving a balance of $8 70 to cover value of care, clover, house slop and milk, and for profit. I think it must be admitted that a good per cent of this margin, as well as the excellent quality of the product, must go to the credit of clover.

I wish to add that comparisons of this kind made with hogs similarly fed at different times during the last five years, have revealed uniformly the same desirable condition even when made with much older and heavier hogs.

Agricultural Items.

Rabbits are said to occupy forty million acres of land in Victoria. No wonder the Australian government offers a handsome bonus for their extermination.

H. Talcott, in the Ohio *Farmer*, says the value of skim milk is not appreciated on the farm. If fed to calves for veal, it is worth one dollar per week, per cow.

Mr. Green, of the Ohio Experiment Station, has been experimenting with the relative profitableness of early and late potatoes, and finds the early varieties ahead.

A new commodity called "cheeserine" will compete with straight cheese hereafter. It is an English substitute, contains nothing harmful, is low in price, and competes directly with common cheese.

Returns from seven co-operative creameries in Connecticut, for 11 months of 1887, show the prices of their butter to have ranged from 22½ to 25½ cents, these prices being realized by the farmers. The skimmed milk was left on the farms.

W. F. Brown says he learned twenty years ago that it was good policy to sell potatoes in the fall when they bring anywhere near a fair price. He thinks that farmers who stored their potatoes last fall, expecting fabulous prices in the spring, are going to get left.

Farming often seems unprofitable because we deal only with the net receipts, and not the gross returns as in other business. We take out a good part of our living before we strike the balance. It is almost impossible to keep an accurate account of what is consumed in the family, when it is not purchased.

The *N. E. Farmer* says: "With a cost of five cents per basket for husking corn, two baskets being required for a bushel, and five cents paid for grinding at the mill, making 15 cents beside the cost of going to mill, it becomes a serious question whether it is not better to put the entire crop into the silo, to be fed grain and stalks together.

A company of practical men have leased five miles of the tunnels of a cement company's works, near La Salle, Ill., for the purpose of growing mushrooms in them. Beds of rich compost will be made in the tunnels, and it is expected the daily shipments will equal 100 bushels, worth 30 cents per pound. The spawn will be imported from France.

The Poultry Yard.

POULTRY EXHIBITION.

First Annual Exhibit of the Eastern Michigan Poultry and Pet Stock Association at Detroit.

When we predicted that this exhibition would not only be a financial success, but that there would be some of the finest birds in the country there, and that in all of the classes it would have to be a good one to win, some of our readers thought we were talking buncome, but the result shows that we were quite right. Such an expert as P. N. Pierce pronounced the show one of the finest of the year in the matter of quality of the birds exhibited.

In Partridge Cochins there were 18 males and a corresponding number of females; all good, as may be judged from the fact that the cock that won first premium at Boston, the cockerel that won first at Grand Rapids, the hen and the pullet that won first at Ontario Exhibition, and at Cleveland were all shut out, not winning better than 3rd. A breeding pen that had cost its owner nearly $200, was beaten by one raised and owned in Detroit. There was nearly equal competition in Light and Dark Brahmas, the Dark Brahma hen and pullet which won 1st. at Indianapolis being beaten by three from Detroit. In Wyandottes and Plymouth Rocks there was a large exhibit and of fine quality. In Black Spanish there were 24 entries, for four exhibitors, and first and second prizes were won by Detroit birds, shutting out completely a pen which its owner expected to win first. Colored, Silver Grey and White Dorkings were well represented. The females in the winning breeding pen of Silver Greys scored an average of 94 points, which is the highest recorded this season. Financially also the exhibit was a success, and the Society promises next year to have the finest poultry exhibition in the West.

Seven full blood bronze turkeys raised by F. A. Barton, of Pinckney, weighed 112 pounds when dressed.

Hudson Taylor, of Independence, Oakland Co., sold to Pontiac parties recently fifty White Brahma chickens that weighed 350 pounds.

H. E. Alvord thinks the most simple pattern of incubators hatch a larger proportion of eggs than those with expensive attachments. Thinks the trouble is not so much to hatch the eggs as to raise the chickens after they are hatched.

Mrs. E. C. Townsend, of Pavilion Centre, N. Y., keeps Plymouth Rocks and Wyandottes in her poultry yards, which she and her son manage together. They breed fancy poultry for sale, as well as fowls and eggs for market. Receipts last year, $280; expenses, $50. The manure from the roots fertilized eight acres of corn.

Creve Cœurs are a French breed and get their name from the peculiar shape of their comb. This is in shape something like a split heart, and the French of this is *creve coeur*. They are a brilliant black in color, and have crests and beards similar to the Houdans, which they resemble to some extent. They have very heavy breast meat, are non-sitters, and produce a large white egg. They seem to be coming into favor in this country and will make a valuable addition to our list of fowls.

A correspondent of the *N. E. Farmer*, who figures his net profits per hen at $2 83 for 1887, thus describes his flock: "We bought a dozen year-old hens of the Plymouth Rock breed, but doubtful pedigree, and ten pullets of most undoubted pedigree (as mixed a lot as one ever sees on any farm), and the flock to-day is composed of their descendants, got by adding a good cock of Brown Leghorn blood one year, a Plymouth Rock cock the next, and so on alternately. It will be conceded that we have no fancy birds. There isn't a pure blooded fowl in the flock. The Plymouth Rock blood preponderates; the Brown Leghorn blood shows itself in many of the pullets, and 'sports' of various sorts and sizes are common." The price at which eggs were sold ranged from 15 and 16 cents in April and May to 38 and 40 cents in November, the average for the year being between 25 and 26 cents. This high average price is due to the goodly number of eggs produced in the fall and winter when they are scarce and high. It is true that pullets that lay vigorously all winter won't increase their product so much in the spring as birds that have rested through the winter, but the average for the year is the test of profit.

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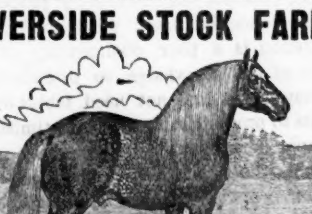

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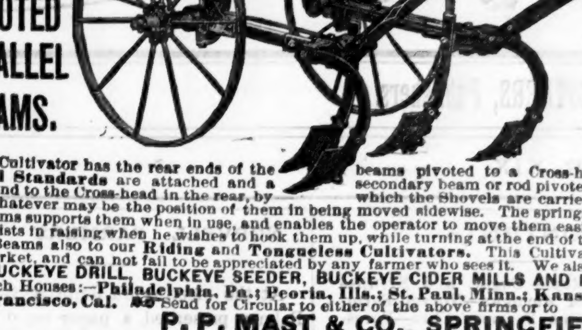

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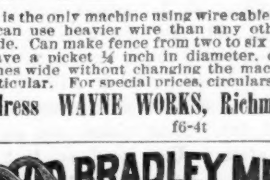

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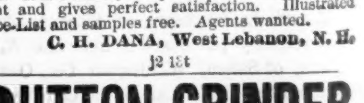

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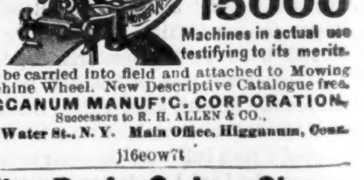

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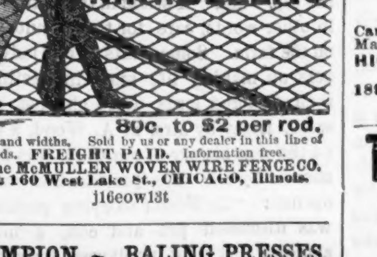

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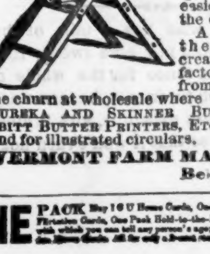

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Horticultural.

GRAPES IN ALLEGAN COUNTY.

The subject of grapes came before the Allegan County Pomological Society at the January meeting.

M. T. Smith, of Hopkins, opened the discussion, saying the first thing to be considered in growing grapes is the location for the vineyard. He prefers an elevation somewhat above the surrounding country. At least the location should have both air and water drainage. He thinks elevation of more importance than exposure, though his choice is south or east. His vineyard is located in all directions, and he finds very little difference in time of ripening on any slope. Wherever the vineyard is located, it should be well cultivated and kept free from weeds and grass. Success depends largely upon proper management. It costs no more to cultivate and prune one acre of grapes than the same of peaches. The selection of varieties is the next important thing to consider. The Concord has long been considered the grape for general cultivation. Probably more money has been made from the Concord than any one variety in this country. If he were to set a vineyard of dark grapes, should set Concords. The Worden has some good qualities and is preferred by some to the Concord. He has made money from Concord grapes and there is money in them even at two or three cents per pound. Yet, if some other grape can be had that is a great improvement over the Concord, it will be an acquisition worthy our attention, and bring still better returns. He thinks this has been found in the white Niagara. He has watched with much interest the behavior of the Niagara, for several years, in fact from its first introduction to the public. About the same time the Niagara was brought to public notice several other varieties came into competition for public favor. Each had advocates and were advertised extensively and pushed with all the influence that could be brought to bear in their favor. He had paid high prices for and tried a large number of them, and given them good care; and after several years of fair trial he finds most of them greatly wanting in some one or more essential points, which will prevent their becoming popular and profitable. While these have gradually lost ground, the Niagara has steadily gained in popular estimation, and as the vine gains age the more positive its good qualities become. It has been thoroughly tested in a large number of States and different kinds of soil, in the hands of all classes of growers; and after passing through such trying and severe tests, the reports and testimony from all these sources place the Niagara grape as the leading grape of the time. It certainly possesses a rare combination of good qualities that are not found in any other grape within his knowledge. The vine is a vigorous grower, stands any degree of cold likely to occur in this latitude; the quality of the fruit is excellent; its productiveness is enormous. Statements from reliable sources show from four to eight tons to the acre. Its keeping qualities are perhaps one of its strongest points. It can be kept in good condition long after most other varieties have disappeared. It can be kept in perfect condition into January. Another strong point is the size, compactness, and beauty of the clusters. These, combined with its high quality, place it in the front rank among American grapes for Michigan. The Delaware grape is among the best in quality and sells readily in market for about three times as much as Concord; but the weak point with the Delaware is that it is not productive. But the vine is hardy and does best when left to run up trees or on the south side of buildings. However over-stocked the market may be with medium-quality grapes, the Delaware has universally sold for a high price, sustaining the statements already made that the public will always pay a good price for a good grape.

W. B. Andrus: The quality of the Delaware is good; but with me it has not been productive, consequently will not pay to grow for market. The Pocklington is hardy in vine, but in quality is not rated very high. I would not recommend it for a market grape. Some of Rogers' grapes have done fairly well with me. The quality is rated above the average. I have sold Rogers for five to seven cents per pound when Concords were selling for three cents in the same market. I think most of the dry land in this locality suitable for grapes if not too low and subject to frost. The Niagara does better in Michigan than it does in New York, with equal care and soil.

Allen Wood: The Concord has long held a leading place among the dark grapes; has been considered the grape for the million. It has undoubtedly been one of the most profitable grapes in the past. It is hardy and productive; the quality is fair. There are some other varieties that are superior in quality, but most of them are not productive enough to become generally cultivated. The Delaware is of excellent quality but lacks productiveness. The Worden is in some respects better than the Concord. Brighton has many advocates and is really a good grape for a red grape. So far as I can learn, the Niagara promises to become the leading grape provided it maintains the good points claimed for it. I believe we can grow the Niagara here in Michigan to a higher rate of perfection than can be done in New York.

F. L. Hickock: My observation has led me to believe that high ground is preferable to level land for grapes; have known elevated sites in favorable locations to sell for $1,000 per acre for vineyards. There must be money in growing grapes or men would not pay such prices for land to grow them on.

M. T. Smith: I would set vines ten feet each way. This gives plenty of room for cultivation. It will not give as many vines to the acre but will be all any one ought to ask for. Good grapes have always brought good prices. All grapes, like any other fruit, sell according to appearance and quality when placed on the market.

G. H. LaFleur: We have in the past discussed almost every other kind of fruit except the grape, but to-day we are to discuss that particular kind of fruit. The soil and location have already been well handled by others. The particular variety or varieties best adapted to this location is under consideration. This point also has already been considered by parties who have had personal experience or large opportunities for observation. So far all the speakers have argued that the Concord and Worden are profitable and the best among the dark grapes, with Brighton for red and Niagara for white. The one point now is, which is the most valuable and profitable to grow of the varieties mentioned? The whole testimony is strongly in favor of the white Niagara. This grape has been before the public for ten years and has passed through severe and trying tests in many different States and in the hands of many different growers. The testimony is almost universally in its favor. The vine is hardy and immensely productive; berries are large; the clusters are very large and compact, and will hang on the vines a long time, without dropping or rotting, after they are fully ripe, and will, if properly handled, keep in good sound condition into the winter months. It can be kept and placed upon the market after other varieties are gone. The quality is so good that it is eagerly sought for as a table grape, hence it must command good prices in the market. The statement made by growers of this grape, in relation to its great productiveness and quality, and the high price for which it is sold, are simply wonderful. There can scarcely be a question as to its many merits. The Niagara grape company are now offering the vines upon such reasonable terms as to place them within the reach of everybody. If this grape shall be extensively grown here in Allegan County it will without doubt add greatly to that vast revenue already derived from the sale of fruit. There is a growing demand for good grapes which is not likely to be more than satisfied by any amount that may be grown.

Wm. B. Andrus, as usual, was on hand with 26 varieties of apples of his own growing, some of which were remarkably fine; also some varieties of pear in sound condition. We hope others will follow Mr. Andrus' example and bring fruit to the meeting in the future.

G. H. LAFLEUR, Sec'y.

GRAFTING AN OLD ORCHARD.

To the Editor of the Michigan Farmer.

Under the above heading in your issue for Feb. 6 it is asked: "When is the best time to do the work and what the kinds to use."

In the interests of the fruit-growers of the State I take issue with Mr. Joseph Lannin in his reply to your subscriber. The best time to graft an orchard, old or young, is before the buds start. Success may sometimes be had in the later grafting, but from forty years' experience I can speak with a good deal of confidence when I say graft as early as you can after danger from freezing the sap in the grafts is over.

Some of our fruits must be grafted early, before the buds start, to succeed at all, such as cherries and plums. And there is no doubt at all but that the apple does better grafted early than late. Besides, the grafts that have the whole season to grow are more certain to pass safely through the winter than the late-set grafts.

And I am as much surprised at the varieties recommended. Of fall apples the Duchess is a poor fruit and a poor shipper; too tender. The Melon is a poor growing tree and short lived. The fruit is first-class—when you get it. I would never plant it for profit. The Maiden's Blush is the only one to be recommended.

Winter apples: The Ben Davis is too poor for a Michigan apple, and with me is not productive, and must take a low place anywhere. The Grimes' Golden is good in quality but fails badly and does not keep long enough to be profitable as a winter commercial apple. The Stark is as tender in the tree as the Baldwin and not half as good nor as fine looking. When the Stark will stand the Baldwin will, if on hardy stocks, certainly, and is more valuable in many points.

Why it is that neither the Red Canada nor the Northern Spy were named I do not understand, these being the two most reliable and profitable apples for Southern Michigan. So far as the well-tested varieties can be recommended these should take precedence.

B. HATHAWAY.

LITTLE PRAIRIE RONDE.

Notes on Lettuce.

Raising lettuce for early and late market, I am in the habit of testing new kinds by the side of old and tried varieties. Last season I found the "New York" fine for late; dark green leaf, large head, some specimens weighing two pounds or more and fifteen inches across, were not unusual. Still, such lettuce is rather too large; it brings no more than a head half the size, while in growing and carrying to market it takes up more room, and one head is often more than a family supply. "Tombannock" came on after the "New York;" this is tender, upright in habit, red-leaved, with yellow head, and very satisfactory for summer marketing. Following this, came "Oak-leaved;" this ran to seed slowly during the last days of June, and from these heads I supplied the last lettuce in our market, the price going up on it, although it is not quite popular, yet as to looks and eating quality. "Deacon" made a splendid, large head, but those who buy lettuce to eat say it is tough and they avoid it when other kinds are to be had. "Hard head" started off almost black in the face, but finally in warm weather and full maturity had a firm, large, yellow head in a reddish envelope of outer leaves, that was very satisfactory to lovers of tender head lettuce. "Boston Market," (or White Seeded Tennis Ball) while it is a good lettuce for growing in a hot bed, is not good for summer or out-door culture, as it runs to seed with surprising rapidity when once the heads are formed.

I tried experiments last season to determine how old and how large plants should be before the final setting. Seed planted in September and the plants wintered over in flats in my winter cellar did not make heads as large or as quickly as those from seed sown in the greenhouse in December, pricked out into flats and set out at the same time in the hotbeds in February. In a later trial for open-air lettuce, plants set under glass in cold frames 3x4 inches apart, and left there till they could be removed to the open ground, being one-third grown, were not so early as plants that were set from the same seed bed into open ground; the latter suffered from cold, but made heads at last before the others, much to my surprise. I think I let them grow too large in too rich soil, the roots were rather poor, the earth did not stick to them. In another trial plants pricked out into poor sand, fertilized with commercial manure, made abundance of root and small leaf growth, were slow in coming to suitable size for transplanting, but when finally transferred to rich soil, they grew without wilting or loss of time and with great rapidity. The conclusion seems to be: that lettuce seed sown thinly in the seed bed and afterward transplanted, when the plant has four or five leaves, directly into the spot where they are to grow, is as good treatment for speed of raising, saving of labor and perfection of head as can be given.—*N. Y. Tribune.*

Poison the Plum Curculio.

There seems to be no doubt whatever but what the plum curculio (*Conotrachelus nenuphar*) can be well nigh exterminated everywhere and regular crops of the stone fruits grown by simply spraying the trees with the arsenical poisons (Paris green and London purple) in water; (1) so soon as the buds begin to swell in the spring; (2) two weeks after the petals fall; (3) then after three weeks again, and (4) for perfection, so soon as through blossoming, with a weak kerosene and soap emulsion. This (4) will kill the leaf lice (*aphidæ*) and plant bugs (*hemiptera*) that puncture the young fruit and cause it eventually to rot. A Michigan gentleman told me last week that he had two large thrifty European plums. "They bloomed freely each year, but the curculio laid her eggs in nearly every plum. Spring before last I sprayed the trees thoroughly once with London purple in water about two weeks after the blossoms fell. That season they matured so great a crop of the finest fruit that I was obliged to prop up all the branches. But to my sorrow this large crop so weakened the vitality of my trees that the next spring both were dead. The spraying seemed to kill every curculio, scarcely a fruit showed her oviposting work, and the plums all ripened without rot." This shows two valuable lessons: (1) Spraying has proven a success, and (2) an overburdensome crop is deathly, especially to a plum.

These sentiments are exactly in line with sense, reason and experience, and especially with our native plums; for these plum fruits are the natural food plant and breeding place of the curculio. This beetle passes the winter in the beetle state, "holed up" like a woodchuck, and emerges in the spring hungry. She at once seeks her natural food plant—these plums—on which to feed, seemingly in preference to all other trees. She usually reaches them before they bloom; therefore just before the blossoms open is the time to spray the trees. But for some reason many of the beetles do not lay their eggs in the fruit until June; hence the necessity of late spraying, for it is possible that these late egg laying beetles reach the trees late. If the native plums are not within her reach the beetle is forced to accept allied plants of the almond family to which the plum belongs, such as the cherry, peach, apricot, etc., and lay her eggs in their fruits. It is of course possible that the cherries, being so close akin to the plums, they may be as acceptable to her for food as the plums, but it is hardly probable. Therefore it is entirely reasonable that, if we have plenty of native plums in and around our orchards of other fruits, by spraying the plums we will destroy this curculio sufficiently for all practical purposes, and so protect all the other fruits from her destructive work.—*D. B. Wier, in American Garden.*

South Haven and Casco Pomological Society.

This society, at a late meeting, discussed the most desirable qualities of the ideal market apple. Mr. W. H. Payne sends us a brief report of the proceedings. At its next meeting the ideal peach will be considered:

While none of the members seemed to think the ideal apple was attainable, all agreed we have some very good varieties, and that while many orchards are unproductive, by reason of too great numbers of worthless varieties and other causes, yet if properly conducted, an apple orchard may be made very productive and profitable. Some thought less space would do. The majority of those present thought 40 feet apart the proper distance to set the trees. Then the orchard must be manured, pruned, thinned and not left in the sod, but cultivated. Spraying the trees and turning in the hogs will conquer the codling moth. Plant but few varieties, five or six are enough for a large orchard. L. H. Bailey stated that he had 1,300 trees and nearly 100 varieties, but if he was to set again he would have but three varieties, viz. the Baldwin, Stark and Ben Davis.

In summing up these various opinions as to the best six varieties I find the order stands thus; first Baldwin, then Red Astrachan, Northern Spy, Duchess of Oldenburg, Maiden's Blush, Wagner.

Pure Maple Syrup.

Prof. A. J. Cook, in the *Indiana Farmer*, gives some practical suggestions, which his experience has found valuable, on the making of maple syrup. He says:

First, I only make syrup. It brings more money than sugar.

Secondly, I will not put any syrup on to the market that is not first class. This gives me a ready market for all the syrup I can produce at gilt edge prices.

Thirdly, To do this last, I only use tin buckets, which by use of the post spout are hung to the tree, and all are covered by pine boards one foot square, painted white on one side and red on the other for convenience in gathering, as the covers are all turned bottom up at each gathering. These covers keep all dirt, snow and rain out, and are indispensable to first class success.

Fourthly, I strain sap three times from bucket to evaporator, the strainers being successively finer and finer. This secures the absolute neatness which a No. 1 syrup requires.

Fifthly, I use the Champion Evaporator, which does very rapid work, is exceedingly convenient, and removes all trouble from incrustation of the bottom of the exporator by the lime.

Sixthly, I strain the syrup as it passes hot from the evaporator, through factory cloth, then let it partially cool to allow the lime to settle, when I turn it at just eleven pounds to the gallon, in gallon cans, and seal air tight.

Seventhly, I only use the best of seasoned wood, and have a nice neat house to work in.

Eighthly, I have only to get my syrup on to any person's table to secure their future patronage.

Onions on Muck Soil.

At the South Haven Farmers' Institute, W. S. Charles, of Bangor, told how he raises onions:

"I can tell you how I grow onions. I bought a swamp and ditched it, and planted to Early Ohio potatoes and hay the first year. Then I put out six acres of onions and the cutworms took the first sown. Then I resowed and had 3,000 bushels at 65 cents per bushel. The next year I put out six acres and got them up in good shape; before they were ripe Chicago smelled them and sent a man over, who paid me $1.235 net for them. I sold this land for $100 per acre after the first crop had paid for it and $100 over. This year I had ten acres and 1,200 bushels. I use no fertilizers for I do not need them. The muck is all the way from one to ten feet deep. Before this I had been west, and I would not give the land in the vicinity of Bangor for all the land west of the Mississippi. On fifty acres we have raised 12,500 bushels of onions. With my experience I think the onion crop more certain than corn. This year all the scullions and poor onions were three loads, which I sold at home for 75 cents per bushel, while for the others I only got 50 cents net. You must be particular to get good seed, about three pounds to the acre. We are troubled with the onion maggot or louse, and I came here to find out if possible how to kill them. Yellow Danvers is by all means the best variety of onion. I have thought the scullions came from seed raised from scullions, which is a common practice, and I think pure seed will produce pure seed. I got a barrel of salt, lime, ashes and phosphorus, and sowed in places but could see no good effect from it."

The Sea Island Humbug.

One of our horticultural readers requests us to expose a seed and plant dealing firm, whose catalogue, among other marvelous fruits, advertises the Sea Island Blackberry, of which they say, "one vine if properly trained will occupy a circle 30 or 40 feet in diameter, and yield 20 to 30 gallons of fruit. One vine when full grown will yield enough berries for an ordinary family." They further say that the plants are "very hardy, withstanding the severe winters of Washington Territory without injury.

We will not expose the firm as our friend requests, for it may be only ignorance they are chargeable with, and not intentional fraud. The testimonials they publish are from persons living in Washington Territory, where this berry seems to have originated. The climate of Washington, especially along the coast and upon the islands, is quite mild, the thermometer seldom dropping lower than 30° above zero, at any time. This mild temperature is due to the tropical ocean currents that wash our western shores. The enterprising firm who are advertising the berry may have been misled by the far northern latitude of the Territory, into supposing that the winters were "severe."

The Sea Island Blackberry will not stand our winters at all, and this is the reason why our nurserymen do not keep and sell it. If any one wants to try it however, they can buy plants of nurserymen in Washington Territory at $5 per hundred, while this firm of which we are speaking charges $1 50 for a single plant.—*Indiana Farmer.*

Horticultural Notes.

KANSAS, where the first apple tree was planted in 1855, now has thirty million orchard trees.

PRESIDENT WILLITTS says the Michigan apple is the standard of a good apple in California.

SPRAYING plum trees to prevent the ravages of the curculio has proved a success. But in avoiding one danger the greedy grower falls into another, he lets the trees overbear, which is nearly always fatal to them.

THE Western New York Horticultural Society has enlarged its borders and become the State Horticultural Society, thus becoming the authorized representative of the horticultural interests of the Empire State. The Legislature is asked for an appropriation to publish annual reports, etc.

Orchard and Garden thinks for an ordinary family's home consumption, four hundred strawberry plants and fifty each of black and red raspberry and blackberry, will give an ample supply of fruit, in a good season, and leave some surplus for canning. Long rows, so the cultivation can be done with a horse, are a great advantage.

ON the bottom lands of the Oconee River, near Gainesville, Ga., on the estate of Mrs. J. M. O'Niel, there is a thrifty apple orchard of 600 acres planted exclusively with one variety, the Shockley. The entire crop is sold to local distillers for the manufacture of apple brandy. Some distilling establishments in the vicinity use 20,000 bushels of apples during the season. The fruit is collected by beating it from the trees with poles until the surface of the ground is covered with the scarlet product. It is then gathered up in wagons and conveyed to the distillery, where it is piled up in heaps containing from 1,000 to 8,000 bushels.

THE *Horticultural Times*, published at London, England, wants to know why English farmers cannot raise apples and potatoes sufficient to supply the English markets, instead of allowing American and Continental growers to fill them with imported goods. England, says that journal, imports $50,000,000 worth of goods every year that might easily be raised at home. The public demands a certain article, the home grower neglects to satisfy it, and the foreigner "fills the bill." Under such condition what wonder that depression exists? The quality of the English-grown apples is very superior, better than that of the importations, yet there is seldom more than a three months' supply grown at home.

A good appetite is essential to good health, and loss of appetite indicates something wrong. Hood's Sarsaparilla creates and sharpens the appetite, assists the digestive organs and regulates the kidneys and liver. Take Hood's Sarsaparilla this season. Sold by druggists.

Received.

ELY & Co., 1303 Market St., Philadelphia, Pa., send us a very compact, well arranged catalogue and price list, in which everything desirable for the garden can be found.

FRANK FORD & SONS, Ravenna, O., issue a wholesale price list of their seeds for the vegetable garden which they recommend as the best grown, and carefully tested as regards vitality. The Crandall currant is a specialty.

S. F. LEONARD, 149 West Randolph St. Chicago, will furnish seeds and garden implements "as good as the best," and anything you want, from the earliest pea to the biggest cabbage. Seeds for the field and flower garden are included.

SELECT ROSES.—Ellwanger & Barry, of Mt. Hope Nurseries, Rochester, N. Y., issue a neat descriptive list of the "queen of flowers," the lovely rose, naming the sorts which are best adapted to special purposes and giving a classification which will be a great help to amateurs. Directions for culture are also included.

GUIDE TO FRUIT CULTURE; J. T. Lovett, Little Silver, N. J. The proprietor of Monmouth Nurseries, sends out a very attractive manual devoted entirely to small fruits and their culture, which catalogues and describes all the leading varieties in its line. It is a valuable pamphlet, handy to have for reference.

FAUST'S catalogue for 1888 includes not only all the well-known and tried sorts of garden, flower, field and grass seeds, but also some promising specialties which have been tested and thought worthy the public notice. A competition is invited by the offer of $100 in cash prizes for the best specimens of some of these novelties. I. V. Faust, 64 and 66 N. Front St., Philadelphia.

SIBLEY'S TESTED SEEDS.—Sibley's seeds are too well and favorably known to need special introduction to an agricultural public. A large and handsome catalogue is issued by the firm, which contains a fine portrait of Mr. Hiram Sibley, now in his 82d year, but still at the head of his immense seed business, not exceeded by any other house in the country. Hiram Sibley & Co., E. Main St., Rochester, N. Y.

The apple crop of the four lake counties of New York, Wayne, Monroe, Orleans and Niagara, was valued at five million dollars last year. P. Barry makes the estimate.

NEW ADVERTISEMENTS.

Salt Rheum

The agonies of those who suffer from severe salt rheum are indescribable. The cleansing, healing, purifying influences of Hood's Sarsaparilla are unequalled by any other medicine. "I take pleasure in recommending Hood's Sarsaparilla, for it has done wonders for me. I had salt rheum very severely, affecting me over nearly my entire body. Only those who have suffered from this disease in its worst form can imagine the extent of my affliction. I tried many medicines, but failed to receive benefit until I took Hood's Sarsaparilla. Then the disease began to subside, the

Agonizing Itch and Pain

disappeared, and now I am entirely free from the disease. My blood seems to be thoroughly purified, and my general health is greatly benefited." LYMAN ALLEN, Sexton N. E. Church, North Chicago, Ill.

"My son had salt rheum on his hands and the calves of his legs, so bad that they would crack open and bleed. He took Hood's Sarsaparilla and is entirely cured." J. B. STANTON, Mt. Vernon, Ohio.

From 108 to 135

"I was seriously troubled with salt rheum for three years, and receiving no benefit from medical treatment I decided to try Hood's Sarsaparilla. I am now entirely cured of salt rheum; my weight has increased from 108 lbs. to 135." MRS. ALICE SMITH, Stamford, Conn.

If you suffer from salt rheum, or any blood disease, try Hood's Sarsaparilla. It has cured many others, and will cure you.

Hood's Sarsaparilla

Sold by all druggists. $1; six for $5. Prepared only by C. I. HOOD & CO., Apothecaries, Lowell, Mass.

100 Doses One Dollar

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Fresh, Reliable; celebrated for Purity and Strong Germinating Qualities. Only 2 and 3c per large package, and novelty extras with all orders. Mammoth Seed Farms! One Acre of Solid Glass! Write for my Beautiful Illustrated Catalogue. Free. H. W. BUCKBEE, Rockford Seed Farm, ROCKFORD, ILL.

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600 ACRES. 13 GREENHOUSES.

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We offer for the Spring trade a large and fine stock of every description of FRUIT and Ornamental TREES, Shrubs, Roses, Vines, SMALL FRUITS, Hedge Plants, Fruit Tree Seedlings and Forest Tree Seedlings. Priced Catalogue, Spring of 1888, mailed free. Established 1852. BLOOMINGTON (PHŒNIX) NURSERY. SIDNEY TUTTLE & CO. Proprietors, BLOOMINGTON, ILL.

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Catalogue Free! Containing all the latest novelties and standard varieties of Garden, Field and Flower Seeds. Gardeners everywhere should consult it before purchasing. Stocks pure and fresh, prices reasonable. Address Hiram Sibley & Co., Rochester, N. Y., or Chicago, Ills.

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Awarded FIRST PREMIUM over everything at the Great St. LOUIS FAIR. Has both Surface and Draw off Skimming attachments. Draws milk or cream first as desired. IS THE BEST CREAMERY of its class on the market. One at wholesale price where there are no agents. Davis Swing Churns, Eureka and Skinner Butter Workers, Nesbitt Butter Printers, &c., &c.

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SEEDS GIVEN AWAY! A package Mixed Flower Seeds (500 kinds) with PARK'S FLORAL GUIDE, all for 2 stamps. New flowers, new engraving; teems with floral hints. Everybody delighted. Tell your friends. Send now. G. W. PARK, Fannettsburg, Pa.

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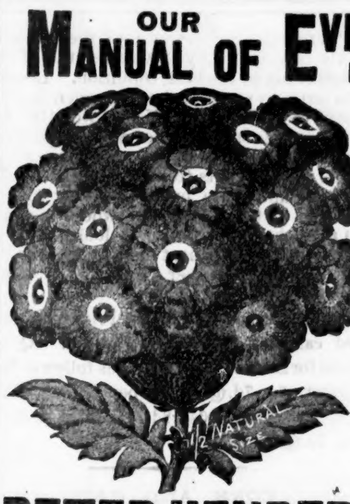
NEW ADVERTISEMENTS. NEW ADVERTISEMENTS.

OUR MANUAL OF EVERYTHING FOR THE GARDEN



is this season the grandest ever issued, containing three colored plates and superb illustrations of everything that is new, useful and rare in Seeds and Plants, together with plain directions of "How to grow them," by PETER HENDERSON. This Manual, which is a book of 140 pages, we mail to any address on receipt of 25 cents (in stamps.) To all so remitting 25 cents for the Manual we will, at the same time, send free by mail, in addition, their choice of any one of the following novelties, the price of either of which is 25 cents: One packet of the new Green and Gold Watermelon, or one packet of new Succession Cabbage, or one packet of new Zebra Zinnia, or one packet of Butterfly Pansy, or one packet of new Mammoth Verbena (see illustration), or one plant of the beautiful Moonflower, *on the distinct understanding*, however, that those ordering will state in what paper they saw this advertisement.

PETER HENDERSON & CO. 35 & 37 Cortlandt St., NEW YORK.

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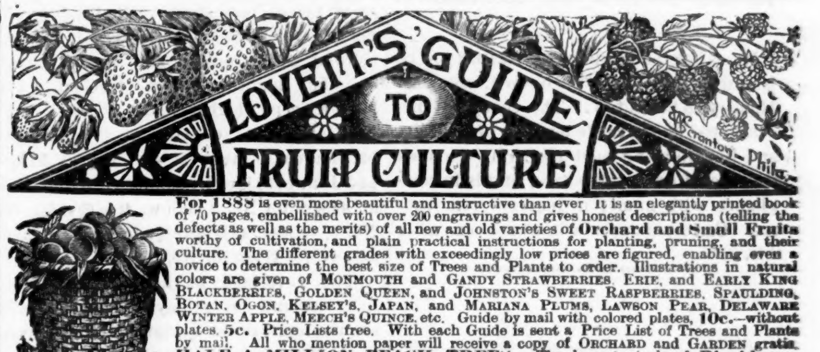
GRAPE VINES, FRUIT AND ORNAMENTAL TREES

Rarest New. Choicest Old.

The aim of THE STORRS & HARRISON CO. is to keep abreast of the times and supply their customers all that is new and desirable in their line; and it is conceded by all that no house in America carries a more varied and complete stock. If you want Choice Tested FLOWER and VEGETABLE SEED sure to give satisfaction, Grand Roses and Beautiful Plants, the best of Apple, Peach, Pear, Plum, Cherry, Quince, Grapes, Small Fruits, Ornamental Trees or Shrubs, for lawn, garden, park or street, do not fail to send for their Valuable CATALOGUE, containing about 140 pages and hundreds of illustrations. They are conducting businesss on a magnificent scale, growing a quarter of a million of Roses and millions of Fruit Trees and Plants annually. Have been in business over a third of a century and have won a reputation of which they have reason to be proud. Have 24 large Greenhouses heated with hot water and steam, and are using 700 acres of land. If you want the best at honest prices, order directly of them and save all commissions. Address THE STORRS & HARRISON CO. PAINESVILLE, LAKE CO., OHIO.



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For 1888 is even more beautiful and instructive than ever. It is an elegantly printed book of 70 pages, embellished with over 200 engravings and gives honest descriptions (telling the defects as well as the merits) of all new and old varieties of Orchard and Small Fruits worthy of cultivation, and plain practical instructions for planting, pruning, and their culture. The different grades with exceedingly low prices are figured, enabling even a novice to determine the best size of Trees and Plants to order. Illustrations in natural colors are given of MONMOUTH and GANDY STRAWBERRIES, ERIE, and EARLY KING BLACKBERRIES, GOLDEN QUEEN, and JOHNSTON'S SWEET RASPBERRIES, SPAULDING, BOTAN, OGON, KELSEY'S, JAPAN, and MARIANA PLUMS, LAWSON PEAR, DELAWARE WINTER APPLE, MEECH'S QUINCE, etc. Guide by mail with colored plates, 10c.—without plates, 5c. Price Lists free. With each Guide is sent a Price List of Trees and Plants by mail. All who mention paper will receive a copy of ORCHARD AND GARDEN gratis. HALF A MILLION PEACH TREES. The largest stock of Blackberry Plants in the United States. An immense stock of Apple, Pear and Nut Trees, Grape Vines, Strawberry and Raspberry Plants, etc. J. T. LOVETT CO., Little Silver, New Jersey.

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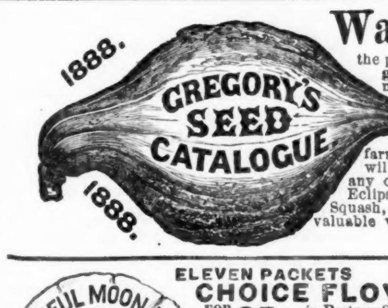

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BURPEE'S SEEDS, FARM ANNUAL FOR 1888 Will be sent FREE to all who write for it. It is a Handsome Book of 128 pp., with hundreds of illustrations, Colored Plates, and tells all about the BEST GARDEN, FARM, and FLOWER Bulbs, Plants, and *Valuable New Books on* Garden Topics. It describes Rare Novelties in VEGETABLES and FLOWERS, of real value, which cannot be obtained elsewhere. Send address on a postal for the most complete Catalogue published, to W. ATLEE BURPEE & CO., PHILADELPHIA, PA.

GRAPE VINES All old and new varieties GRAPES, Extra Quality. Warranted true. Also other SMALL FRUITS. Cheap by mail. Descriptive Catalogue *Free*. Sole owners and introducers of the new EATON Black Grape, now first offered for sale. Headquarters and lowest rates for EMPIRE STATE & NIAGARA. T. S. HUBBARD CO., Fredonia, N.Y.

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100 Varieties. Also Small Fruits. Quality unsurpassed. Warranted true. Very cheap. 3 sample vines mailed for 15c. Descriptive price list free. LEWIS ROESCH, Fredonia, N.Y.

FREE To All Seed Buyers Our complete illustrated Annual of Tested Seeds, Bulbs, Tools, etc., tells all about seeds and gardening. Colored Plates. A.W. LIVINGSTON'S SONS, DO YOU WANT SEEDS *Prices low for reliable seeds.* Sold last season to Thousands of Farmers and Gardeners and no complaints. We are Growers as well as Dealers. Originators of Acme, Favorite and BEAUTY Tomatoes, &c. Box 193, Columbus, O.

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Faust's Special Dollar Collection of Vegetable Seeds for 1888: 35 full-sized packets of the Choicest and Newest Vegetable Seeds sent postpaid for $1.00. Our Grand Pansy Collection of 10 Finest Varieties (one packet each) postpaid for 40 cents. Pearl Collection of Popular Flower Seeds: 11 packets of the most easily grown varieties postpaid for 25 cts. Ruby Collection, comprising 16 packets of Rare and Beautiful Flower Seeds, Petunias, Balsams, Pinks, etc., sent postpaid for 50 cents. Our seeds are put up in illustrated, lithographed packets, with full culture directions on each. Catalogue free. I. V. FAUST, 64 & 66 North Front St., and 100 Arch St., Philadelphia, Pa.

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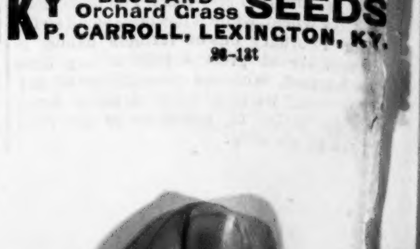

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MICHIGAN FARMER,

—AND—

STATE JOURNAL OF AGRICULTURE.

GIBBONS BROTHERS

—SUCCESSORS TO—

JOHNSTONE & GIBBONS, Publishers.

Nos. 40 and 42 West Larned St.,

DETROIT, MICH.

Eastern Office: 21 Park Row, New York,

P. B. BROMFIELD, M'gr.

*** *Subscribers remitting money to this office would confer a favor by having their letters registered, or by procuring a money order, otherwise we cannot be responsible for the money.*

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Subscribers wishing the address of the FARMER changed must give us the name of the Postoffice to which the paper is now being sent as well as the one they wish to have it sent to. In writing for a change of address all that is necessary to say is: Change the address on MICHIGAN FARMER from —— Postoffice to —— Postoffice. Sign your name in full.

MICHIGAN FARMER AND STATE JOURNAL OF AGRICULTURE

DETROIT, SATURDAY, FEBRUA'Y 25, 1888.

This Paper is Entered at the Detroit Postoffice as second class matter.

TO BE ISSUED ON SATURDAY.

Hereafter the MICHIGAN FARMER will be issued on Saturday of each week, instead of Monday as heretofore. The change is necessitated by the cattle markets of this city and Buffalo being held earlier in the week than was formerly the case, and is in compliance with numerous requests from readers. Correspondents will please remember this.

WHEAT.

The receipts of wheat in this market the past week amounted to 29,757 bu., against 23,286 bu. the previous week, and 40,099 bu. for corresponding week in 1887. Shipments for the week were 21,379 bu. against 1,541 bu. the previous week and 87,831 bu. the corresponding week in 1887. The stocks of wheat now held in this city amount to 1,374,175 bu., against 1,372,432 bu. last week and 2,725,429 bu. at the corresponding date in 1887. The visible supply of this grain on Feb. 18 was 39,564,703 bu. against 40,287,617 the previous week, and 59,886,568 for the corresponding week in 1887. This shows a decrease from the amount reported the previous week of 722,914 bushels. As compared with a year ago the visible supply shows a decrease of 20,321,865 bu.

The occurrence of the anniversary of Washington's birthday on Wednesday last interfered with business the past week, the day being observed as a holiday by all the banks, boards of trade, etc. Prices show very little change as compared with a week ago. No. 1 white is a quarter cent higher, No. 2 red steady at same figures, while in futures No. 2 red for May delivery has declined about ⅜c. On Friday the market was quite heavy at the opening, prices declining ¼@⅜c below those of the previous day, but the loss was fully recovered at the close and the general feeling was one of firmness.

The following table exhibits the daily closing prices of spot wheat in this market from Feb. 1st to Feb. 24th, inclusive:

	No. 1 White.	No. 2 Red.	No. 3 Red.
Feby. 1	85½	85⅛	....
" 2	85½	84¾	....
" 3	85½	85	....
" 4	86⅛	86	....
" 6	85⅛	84⅝	....
" 7	85	84½	....
" 8	84⅝	84¼	....
" 9	85	84½	....
" 10	84¾	84½	....
" 11	85	84½	....
" 13	85½	85	....
" 14	85½	85	....
" 15	84½	84¾	....
" 16	84⅞	84¾	....
" 17	84⅞	84¾	....
" 18	85	85	....
" 20	86	85⅛	....
" 21	86	85⅛	82
" 22	...	...	....
" 23	84⅞	84½	....
" 24	84½	85	....

For No. 2 red the closing prices on the various deals each day of the past week were as follows:

	Mar.	Apr.	May.
Saturday	....	....	87¾
Monday	....	....	87¾
Tuesday	....	....	87¾
Wednesday	....	....	....
Thursday	....	....	87
Friday	....	....	87¾

Official crop reports from India are not very favorable. The area under wheat in the Punjab in 1887-8 is officially reported at 5,588,500 acres, or six per cent. less than the area last year (5,943,400 acres) and 15 per cent. below the acreage two years ago. The decrease appeared to be largely due to unfavorable weather conditions. The net result appears to be that this year's crop will be little, if any, larger than last year's, and consequently stocks being small, shipments will hardly equal or exceed those of the season now closing.

The French wheat crop is reported to be coming through the winter in good condition.

While the statistical condition of wheat is strong, and becoming stronger each week, it is a singular fact that no one seems to have confidence in the future of the market. Perhaps a month from now speculators will be wishing their foresight was as good as their hindsight.

Exports are keeping up well, especially of flour.

The *Northwestern Miller*, of Minneapolis, yesterday said of the outlook for the growing crop:

"With the exception of small areas in Michigan, Pennsylvania and New York, the entire crop of winter wheat is now bare of snow. From the 13th until the 16th inst. there was more or less freezing and thawing weather. From the 16th to 19th, beautiful spring-like weather, followed by a very sudden and severe freeze. We are now in the midst of the first critical period of the trials and struggles of the winter wheat crop of 1887 and 1888. The movement of winter wheat, while it has been small so far during February out of farmers' hands, is even smaller at present than at any time since harvest, with no probability of any change until we have some definite facts, either for better or worse, as to the final outcome of the crop.

"From the region south of the Ohio, reports are generally favorable, the Texas crops being in the best condition. Leaving the territory south of the Ohio river, and beginning east of New York, we still find considerable snow on the wheat, and so far no complaints as to the condition of the crop. The reports from Michigan, Indiana, Illinois and Ohio bring out very forcibly the fact that the late-sown wheat to-day is in a weakly condition. It looks as if the condition of the wheat in Kansas was better than in any other State in the winter wheat belt."

The Liverpool market on Friday was quoted easy and prices were lower. Quotations for American wheat are as follows: No. 2 winter, 6s. 7d.@6s. 8d. per cental; No. 2 spring, 6s. 6d.@6s. 8d.; California No. 1 6s. 7d.@6s. 8d.

CORN AND OATS.

CORN.

The receipts of corn in this market the past week were 15,629 bu., against 12,070 bu. the previous week, and 41,729 bu. for the corresponding week in 1887. Shipments for the week were 11,392 bu., against 4,089 bu. the previous week, and 62,720 bu. for the corresponding week in 1887. The visible supply of corn in the country on Feb. 18 amounted to 8,334,522 bu. against 8,339,156 bu. the previous week, and 16,569,794 bu. at the same date in 1887. The visible supply shows an increase during the week indicated of 4,639 bu. The stocks now held in this city amount to 46,364 bu. against 44,152 bu. last week, and 59,505 bu. at the corresponding date in 1887. As compared with a year ago the visible supply shows a decrease of 8,235,272 bu. Corn has ruled quiet but steady all week, with a slight gain in values. No. 2 mixed is quoted at 31⅛c per bu., and No. 2 yellow sold at 51¼c. The market closed tame yesterday, sales being very light. At Chicago the market was weak until Friday, when prices showed an advance, and finally closed at the highest points reached, and half a cent higher than a week ago. No. 2 spot closed at 48⅜c per bu., March delivery at 47c, May at 51⅜c, and June at 51¼c. By sample corn sold there at 48½c for No. 2 yellow, 46½@46¾c for No. 3 yellow, 48¼@48½c for No. 2 mixed, and 47¼@47½c for No. 3.

The Liverpool market was dull with light demand on Friday. The following are the latest cable quotations from Liverpool: Spot mixed, 4s. 9½d per cental; February delivery at 4s. 9½d; March at 4s. 8d., and April at 4s. 8d per cental.

OATS.

The receipts at this point for the week were 29,911 bu., against 10,378 bu. the previous week, and 22,005 bu. for the corresponding week last year. The shipments for the week were 2,714 bu. against 1,879 the previous week, and 11,295 bu. for same week in 1887. The visible supply of this grain on Feb. 18 was 4,953,602 bu., against 5,188,537 bu. the previous week, and 4,871,405 at the corresponding date in 1887. The visible supply shows a decrease of 234,935 bu. for the week indicated. Stocks held in store here amount to 39,504 bu., against 23,378 bu. the previous week, and 16,833 bu. at the corresponding date in 1887. Oats keep very steady, and the fluctuations in values are so light as to be hardly noticeable. No. 2 white sold yesterday at 35½c per bu., No. mixed at 33½c, and some choice light mixed at 33½c, the market closing quiet. The movement in this grain is much lighter in this market than last year. At Chicago oats are stronger in sympathy with wheat. Yesterday No. 2 spot closed there at 27¼@29¼c per bu., May delivery at 31⅛c, June at 31⅛c, and August at 28c. By sample sales were made at 29⅜c for No. 2 mixed, 32½@33½c for No. 2 white, and 31@32c for No. 3 white. The New York market was weak and lower early in the week, but has recovered, and values are about the same as last reported. Quotations there are as follows: No. 2 white, 39¼@41c; No. 3 white, 38⅛@39c; No. 2 mixed, 38½@38¾c. In futures No. 2 mixed for March sold at 37¼@37⅜c, and May at 37¼c. Western sold at 40@46c for No. 2 white, and 39@43c for mixed.

DAIRY PRODUCTS.

BUTTER.

Under increased receipts the market has held firm at advanced figures as compared with a week ago. The warm weather of the past few days seems to have stimulated shippers in the interior, but so far the demand has been sufficient to keep all desirable stock well cleared up. Quotations range as follows: Fine packed dairy 19@21c; extra, 22@23c; choice dairy rolls, 18@20c; medium to good dairy packed, 17@18c; medium to good dairy rolls, 16@17c; creamery, 28@30c, the latter for choice. There is some difficulty in working off stock which is in unsatisfactory shape, and we see some lots coming in which will make poor returns for the expense, labor and time consumed in making it. The market could get along better without such butter. At Chicago butter has ruled quiet but steady. The demand is fair, and values show little change. Dealers assert sales are more difficult to make at ruling figures, and anything off in flavor or condition is passed by. The demand for shipment is rather light. Quotations there are as follows: Fancy Elgin creamery, 26@28c per lb; fine Iowa, Wisconsin and Illinois do, 23@25c; fair to good do, 18@23c; low grades, 14@17c; fancy dairies, 22@24c; fair to good do, 17@21c; common and packing stock, 12½@13½c; roll butter, 15½@17½c; grease, 7@8c. At New York the market is fairly active and steady, with all choice grades holding up well in value. The *Daily Bulletin* says of the market:

"The supply of western butter is rather larger than generally anticipated, but the bulk running of simply good useful quality, so there does not appear to be any surplus of strictly fancy grades, and such are firmly held on the basis of 30c for Elgin and Pa., and 28c for western other than Elgin, with occasional exceptionally fancy held a fraction higher. Leaving fancy, there is a liberal supply of all other grades of western creamery, and though good useful quality is in some demand from out-of-town dealers, holders are still inclined to meet them promptly, and prices show considerable irregularity. Summer and fall-made creamery tubs are very slow. State creamery firkins in fair request and firm. New State dairy tubs are irregular in quality, and range all the way from 20 to 28c, with very few good enough to bring the top figure. Old State dairy rather quiet, but prices steadily held. Imitation creamery quiet, but fine grades held about steady. Western dairy and factory quiet and unchanged. Low grade factory still scarce and firm. Fine roll scarce and in demand."

Quotations in that market on Friday were as follows:

EASTERN STOCK.

Creamery, State, tubs	21	@26
Creamery, State, firkins	20	@23½
Creamery, Penn., fancy		@30
Creamery, prime	24	@26
Creamery, good	21	@23
Creamery, fair	18	@20
Creamery, Western, June	17	@21
State dairy, tubs, fancy	25	@27
State dairy, tubs, good	23	@24
State dairy, tubs, fair	19	@21
State dairy tubs, ordinary	17	@18
State dairy, Welsh, tubs, prime	23	@25
State dairy, Welsh, tubs, fair to good	19	@21
State entire dairies, fancy	24	@25
State entire dairies, prime	22	@23
State entire dairies, fair to good	19	@21
State dairy firkins, good to prime	20	@23

WESTERN STOCK.

Western Creamery, fancy	28	@
Creamery, Elgin, fancy		@30
Western imitation creamery, choice	23	@24
Western do, good to prime	20	@22
Western do, ordinary	16	@17
Western dairy, fine	20	@21
Western dairy, good	17	@19
Western dairy, ordinary	16	@16½
Western factory, fancy	23	@23½
Western factory, current make, prime	19	@21
Western factory, ordinary	14	@17
Rolls, fresh, fancy		@
Rolls, good to prime	19	@20
Rolls, fair	15½	@18

CHEESE.

The western markets are showing more firmness, owing to a fairly active demand and diminishing stocks. Advices from abroad indicate a slight advance in values and a somewhat improved tone in the trade. Business, however, drags some, and there is not much snap to the trade. In this market nothing of interest has occurred during the week. Cheese has neither advanced nor declined, and it can be quoted as quiet, steady and unchanged. Quotations here are 12@12½c for full cream Michigan, 10¾@11c for Ohio, and 12½@13c for New York; good to choice skims, 9@10c. At Chicago the market has strengthened some under an improved shipping demand. Receipts there during the week ending February 18th were 1,213,322 lbs., and the shipments were 1,426,705 lbs. Quotations there are as follows: Choice full cream cheddars, 10¾@11c per lb; flats (2 in a box), 11½@12c; Young America, 12½@13c; low grades, 5@9c skims, choice, 6@7c; fancy 1-lb skims, 9½@10c; hard skimmed, 2@4c; brick cheese, 12½@13c.

Quotations in that market Friday were as follows:

State factory, fancy, white	12½	@
State factory, fancy, colored	12	@12¼
State factory, choice	11¾	@12¼
State factory good to prime	11	@11¼
State factory fair	10¾	@11
State factory ordinary	10	@10½
State factory, light skims, fine	9½	@10
State factory, part skims, good	8½	@ 9
State factory, part skims, fair	7½	@ 8
State factory, skims, ordinary	6	@ 7
State factory dead skims	3	@ 5
Ohio flats, fine	11½	@12
Ohio flats, ordinary	10	@11¼
Pennsylvania skims	1	@ 2

The Liverpool market on Friday was steady, with American cheese quoted at 58s. 6d. per cwt., an advance of 6d. from the figures quoted one week ago.

WOOL.

The wool markets have not been so active the past week. Wednesday was observed as a holiday, and this interfered somewhat with business.

At Boston, Ohio and Pennsylvania wools are quiet and without change. Ohio XX and above is quoted at 32@32½c, Ohio X at 30@31c, Ohio No. 1 at 36c, Michigan X at 28@29c, Michigan No. 1 at 34@35c, and unmerchantable Michigan at 21@22c. Delaine wools are in improved demand and firm. Michigan delaine is quoted at 32@33c, and Ohio at 34@35c. Texan and Territory wools are fairly active at unchanged figures. In foreign wools Australia is steady, and in good demand. Australian clothing wools (Merino) are not doing so well, on account of the low price at which XX American fleeces are ruling. Carpet wools are active and firm.

The London wool sales are still in progress, and reports show considerable changes in values, but this is largely owing to the different conditions of the offerings. Poor samples have frequently been withdrawn, while desirable wools were actively competed for. Prices for good wool remain at about the range at which they opened.

We note that the Boston *Commercial Bulletin* says the trade is complaining of the way in which Michigan fleeces are being put up, a large amount of twine being used and considerable foreign matter being found in the fleeces. This is an evil our wool-growers should take steps to remedy, as a few such fleeces, put up by a careless or dishonest person, hurt the sale of the fleeces of his neighbors, and finally injures the reputation of the State. This means a loss on every pound of wool sold, as buyers will be compelled to discriminate against the wool of a State where such dishonest practices are tolerated. Here is an opportunity for the various associations of wool-growers in the State to help the interests of their special industry by bringing about a reform.

The New York market has weakened a little, and values on extra fine goods have declined slightly. The export demand has been rather light, and reports from Liverpool were not favorable to a firm market early in the week. It has since improved a little in tone. The *Daily Bulletin* says of the market:

"The market remains only moderately active and without feature of unusual significance or decided importance. The tendency among holders to take a steadier view of the situation continues, particularly on choice and fancy goods, though also shown to some extent on lower qualities, as the assortment of the latter is becoming somewhat reduced. Exporters are "looking around" as usual and picking up odd lots, though, as a rule, not in a hurry and refusing to advance their bids, though in some cases admitting that private advices from abroad are reasonably cheerful. Home business is about as usual, some dealers getting a pretty full run of orders and others light; but on the whole the distribution holds a fair average."

MR. JACKSON VOORHEIS, of Davisburg, Oakland Co., writing under date of February 17th, says: "The rain of Tuesday morning of this week, and the thermometer falling 14 degrees below zero, by Wednesday morning, has probably ended all prospects for a peach crop in this locality the present season." Mr. Voorheis is largely interested in peach growing.

Jackson is getting to be quite a bean market. A single firm purchased ten thousand bushels last season, although the crop was light.

ADVANCED REGISTRY FOR MERINOS.

The meeting held at Rochester, December 19th, to consider the subject of advanced registration and standard rank of Merinos was well attended, and much interest manifested upon the part of those present.

Papers were read by Lionel Sherwood, and the writer. Mr. Sherwood showed the need of something that would make a distinction between our best sheep and the culls; the importance of individual pedigrees for ewes as well as rams, and the good result to be attained by establishing a standard rank based upon merit and the resultant type-breeding of our flocks.

The discussion which followed was participated in by H. Cordinio Smith, John S. Beecher, C. W. Lewis, W. E. Dana and others. L. Sherwood, Peter Martin, John S. Beecher, L. L. Lusk and John P. Ray were appointed a committee to consider the subject further, and met for that purpose the following forenoon.

After the adjournment of the evening session of the State Society; a meeting was held where a new association was organized, known as Standard American Merino Sheep Breeders' Association. A constitution and by-laws were adopted; officers elected for the ensuing year as follows: President, Henry C. Burwell, Bridport, Vt.; Vice President, T. J. Wynn, Lakeville, N. Y.; Secretary, John P. Ray, Hemlock Lake, N. Y.; Treasurer, J. B. Gardner, Hopewell, N. Y. Executive Committee—H. E. Sanford, West Cornwall, Vt., and Lionel Sherwood, Newark, N. Y.

The officers were empowered to appoint members of the executive committee in other States.

An adjourned meeting was held at Honeoye January 4th, 1888, to arrange for a spring shearing, which will be held at Honeoye, N. Y., May 1st and 2d, in connection with the Ontario and Livingston Association. Sheep will be scaled and shorn for the standard rank. The committee to review the work of the scaling expert will consist of John S. Beecher, Livonia, N. Y., and Hon. C. R. Case, Allen's Hill, N. Y.

A register will be published as soon as practicable after shearing time. Sheep that are elegible to registration under the rules:

First.—All descendent in the male line of the stock rams Sweepstakes, Golden Fleece, Fremont, Eureka, Bonaparte, Kilpatrick, Bismarck, All Right, Eureka 3d, Rip Van Winkle and Volunteer.

Second. All the blood lines must have been previously recorded in some State, American or Spanish Merino register. The sheep will be all grouped together as American Merinos. Much stress in the introduction will be laid upon the blood of the foregoing great stock rams, and the marvelous improvements which they made. It will be further shown that back of the great work accomplished by Hammond, Robinson, Sanford, Rich, Stickney and Cutting, there is but little of value except purity of blood.

In the stock ram list there will be a standard department where all rams will be entered that, shorn in public, will yield a fleece of twenty-five pounds and upward upon the basis of a year's growth, with carcass weighing 110 pounds, and being scaled by an expert and his work reviewed by a committee of two, shall scale seventy-five points and upwards under the following scale:

SCALE OF POINTS FOR STOCK RAM.

Constitution—Fifteen Points.

1st. Bone, 5 points.
2d. Physical development and general appearance, 10 points.

Form—Forty Points:

3d. A broad head, broad, wrinkly nose and face, covered with a soft, velvety coat, 5 points.
4th. Short, broad, muscular neck, well set on shoulders, 5 points.
5th. Massiveness of shoulder, as to depth and breadth, 5 points.
6th. Level, straight back and rotundity of rib, 5 points.
7th. Breadth and length of hips, 5 points.
8th. Straight forelegs, well set apart, 3 points.
9th. Straight hind legs, and set so as to give a perpendicular appearance to hind parts, 5 points.
10th. Soft, thick, velvety ear, 2 points.
11th. Pure white nose, ears and hoofs, 5 points.

Wrinkles—Fifteen Points:

12th. Heavy, pendulous neck, 5 points.
13th. Across arm and point of shoulder on side, and running well under, 5 points.
14th. Tail, hip-folds and flank, 5 points.

Modified for Delaine ram yielding a staple of 2¾ inch and upwards.

12th. A deep gullet and heavy cross at brisket, 5 points.
13th. Heavy flank with fold extending upward on side and back of shoulder, 5 points.
14th. Heavy tail, 5 points.

Density of Fleece.—Fifteen Points:

15th. On neck, 3 points.
16th. On back, 3 points.
17th. On side, 3 points.
18th. On hip and extending to flank, 3 points.
19th. On belly, 3 points.

Covering—fifteen points:

20th. Crown of head or cap, 3 points.
21st. Cheek, 2 points.
22d. Fore leg, 2 points.
23d. Arm pit, 2 points.
24th. Hind leg, 2 points.
25th. Inside of flank, 3 points.
26th. Connection between tag wool and belly, one point.

Fibre to be indicated as 'fine,' 'medium,' and 'coarse.'

Oil, as 'buff,' and 'white.'

SAMPLE PEDIGREES.

Blackstone 1500 (W. G. Markham 200.) Bred by W. G. Markham, Avon, N. Y., in 1887. Sire, General 204; dam (75) by Dean's Wrinkly 58; 2d dam (40) by Golden Fleece 70; 3d dam bred by E. Hammond, Middlebury, Vt., by Sweepstakes 9.—Record April 15, '89: Fl. 30 lbs., 10 oz.; Car. 130 lbs.; Sta., 2½; Fib. 3½. Fibre, medium. Oil, buff.

SCORE:

1	2	3	4	5	6	7	8	9	10	11
5	10	4	4	5	4	4½	2½	4	2	3

12	13	14	15	16	17	18	19	20
4	4½	3	2½	3	2	2½	2	3

21	22	23	24	25	26	Total.
2	1½	1¼	2	2	1	—84.

Ewe W. G. Markham, (197.) Bred by W. G. Markham, Avon, N. Y., in 1887. Sire L. P. Clark 207; dam (50) by Torrent 71; 2d dam (38) by Addison 100; 3d dam bred by R. J. Jones, West Cornwall, Vt., by All Right 193.—Record April 15, 1889: Fl. 18 lbs.; Car., 87 lbs.; Sta., 2¾; Fibre, 4.

Such rams will be entered with pedigree record and score as above.

In flock histories all purchases of ewes will be mentioned, and blood lines indicated as Hammond, Sanford, Robinson, Rich, Stowell, Stickney, Clark, etc., then follow the names and registered numbers of stock rams used, then individual pedigrees of all ewes same as stock rams are usually recorded, with letters to indicate from which of the foregoing great sires they are descended; then follow with the pedigrees of standard ewes that are made so by being shorn at public shearings, or at the place of the owner under the rules, by yielding a fleece weighing fourteen pounds and upwards, on the basis of a year's growth, and whose carcass shall weigh seventy pounds, with record of length of staple, fibre and color of oil.

JOHN P. RAY, Secretary.

A BRIEF RESPONSE.

"The columns of your paper one year ago and, I think, previous to that date, contained several communications from the pen of 'Old Genesee,' nearly all of which were continual onslaughts on protection to American industries and in favor of free trade."—J. A. Button, in last FARMER.

Not exactly, neighbor Button, for I think a careful examination of the columns of the FARMER will show no article of mine on any subject between November and December of 1886 and February 18th, 1888. I plead guilty to the writing of a series of articles—ten in number—intended for the FARMER, and the greater part of which were published in its columns, and for the non-appearance of the last three of the series the editor a few weeks since gave an explanation, no doubt satisfactory to himself. So far from complaining at the non-publication of the last three articles, I feel more like thanking the editor for the ample space allowed to the others, though I did feel as though his "explanation" ought to have been laid before the readers at an earlier day. As it is, the readers of the FARMER will never see the last three articles. Mr. Button calls these articles "onslaughts on protection to American industries." Now, I am not sensitive about the title given to my productions; but desire to call the attention of Mr. Button, and other readers of the FARMER, to the fact that the articles were from the beginning directed against the wickedness of a system of taxation which, while it lets the property of the wealthy go free, extracts, little by little, the support of the government out of the wants of the people. I have never seen any other writer take exactly the same ground. My object was to strip this protection humbug of the drapery with which its ingenious advocates had surrounded it, and let it stand in its naked deformity before the world, believing as I then did, and as I now do, that its whole principle is radically wrong. And if it is right that the property of the country should sustain State and local governments it is equally wrong that it should not support the national government in the same way. I now appeal to the columns of the FARMER to bear me out when I boldly assert that upon this ground I was never met by any of my opponents. No, kind reader, that man does not exist with sufficient intelligence to write a respectable article for a public journal, who will hold up his head and in the presence of his country and his God contend that it is right to make the consumer, the toiler, the masses of the people support the government through their wants and their necessities, while the wealth of our millionaires is exempted from taxation. But I have not come to reopen the argument of the case, but simply to call the attention of the readers of the FARMER to the fundamental principle upon which my arguments were based, and to leave them to judge whether they deserve the appellation of "tirades" or not. But passing from this old discussion and coming down to the sore spot with which so many are just now afflicted, I desire to define my position, which I can perhaps best do in the same language I used before the Wool Growers' Convention at Lansing, and in the presence of the editor of the MICHIGAN FARMER. I stated that were it my power to make a tariff law upon this wool question, I would first bring down the duties on manufactured goods to the same percentage the farmer gets upon his wool, and then, were the duties on wool to be removed, I would at the same time sweep away the duties on woolens, thus giving the farmer an equal chance when he buys as when he sells. And unless that were to be done I should insist that present duties on wool be retained. The great trouble with this whole tariff business is that the farmer and manufacturer don't "work on an evenness." When the farmer gets 30 per cent. the manufacturer must have 60 or 70. This is a plain state of facts, and one against which our farmers should have rebelled long ago. In conclusion, I will pledge myself, both to the publishers and readers of the FARMER, that from this time forward its columns shall not be over-burdened with articles from my pen.

OLD GENESEE.

A PERTINENT INQUIRY.

WILLIAMSTON, Feb. 13, 1888.

To the Editor of the Michigan Farmer.

It appears that some of the readers of this paper take exceptions to some articles that have appeared in its columns, criticizing the attitude President Cleveland has assumed towards the wool growers of this country. Now, as the FARMER has always been strictly a non-partisan paper, it seems as though it was the proper place to discuss the subject of tariff, as far as the interest of the farmer is directly concerned. I have always been a democrat—simon pure—take no political paper except the Detroit *Free Press*, and I am sure I would get nothing but a partisan view from that paper. Now we should remember that the wants and requirements of the present time are altogether different from what they were sixty years ago. This is an age of improvement and progress; progression is the watchword of the American nation. The farmer must begin to think for himself what is for his own interest, and not depend altogether on hiring men at eight dollars a day to go to Washington and do all of his thinking for him. I do not wish to discuss politics in general, as I am not an aspirant for political honors, but I would like to have some of my brother farmers explain why we should raise free wool to buy protected goods?

DEWITT J. HARRIS.

St. Johns Institute.

The St. Johns Institute was, in nearly every respect, a very pleasant affair. R. B. Caruss, the President of the Clinton County Wool-Growers' Association, presides in a very easy manner and has a way of making all feel at ease and at home while the Institute was in session. Decatur Bross, the Secretary, is a very able worker and an efficient officer in both institute and association affairs. The entire programme was carried out as advertised, with the exception of the address expected of Mr. Rich on the "Tariff and Wool." On account of business calling him to the northern part of the State, Mr. Rich was unable to attend. Wm. Ball, of Hamburg, was present and read a paper not advertised, and aided very materially in the discussions. The paper by James W. Besley on the "Monuments of the Past, Present and Future" was an amusing affair. After describing some of the ancient and modern monuments, he gave a description of a plan for a monument of the future. He gave the prominent free trade statesmen an emblem to represent each of them in the foundation, and proposed placing on the dome, with a large cannon loaded with grape and cannister, the President, which he is represented as pointing at the domestic sheep, while at his feet is to lie the Rocky Mountain goat—raw material—the fleece of which Frank Hurd is holding before his eyes while he takes aim at the improved Merino sheep of the country. The paper was a clever piece of lampoonic satire that needs to be heard to be appreciated.

WIXOM, Feb. 20th, 1888. N. A. CLAPP.

Stock Notes.

Wm. Fishbeck & Son have sold to R. R. Smith, of Howell, the eight months' old calf, Victoria Duke of Woodland, sired by 37th Duke of Hillsdale, 80103; dam, Maud, by Prince Royal 36626, tracing to imp. Victoria by Swiss Boy (12164).

W. C. Wixom, of Wixom, Oakland Co., has sold to H. A. Wells, of Rochester, the young Shorthorn bull Barrington Lad, by Barrington Duke 7th 72667, dam Maggie Wellington 3rd (Vol 29), by Renick Sharon 53530, tracing to imp. Henrietta by Rea Prince (2489). This bull is a deep red with star, 8½ months old, and weighed at shipment 760 pounds. He is an extra fine show calf, and cannot fail to make Mr. Wells a fine animal for the head of his herd.

MR. H. L. LINTZ, of Rochester, Oakland Co., who has been engaged in breeding hogs and poultry, having lost his wife, has decided to leave his farm. He has a clearing out sale on March 6th, and will dispose of all his stock, cattle, horses, sheep, hogs, etc., and all his implements and machinery.

NEWS SUMMARY.

Michigan.

There are 2,399 men on the muster roll of the State troops.

W. E. Negus, well known in Dexter and vicinity, died at Helena, Montana, recently.

The decorations for the banquet of the Michigan Club in this city on the 22nd cost $3,000.

There have been twelve cases of typhoid fever at the Adrian Industrial School, and four deaths.

The stock in the Pontiac electric company has all been taken, and a company organized with $12,000 capital.

C. E. Young, the alleged defaulting cashier of the Michigan Carbon Works, is said to have settled with the company for $15,000.

The Michigan Pulp Company, of Niles, has made a piece of pasteboard 61 inches wide and 37 miles long, without a break in the web.

V. & E. B. Day, of East Rose, Kalamazoo County, are clearing a large tract of swamp and hard land and selling hundreds of cords of wood. Where's the forestry commission?

The boiler of Newell's saw-mill at Morenci exploded on the 21st, causing the death of the engineer, Wm. Smith, and injuring three other men.

P. B. Sanborn, of Port Huron, has five hundred fowls, of fifteen varieties, and is hatching chicks "right lively" by the use of incubators.

Hon. Jesse H. Beeson, wealthy farmer and well-known resident, died at his home on McKinney's Prairie, Cass County, last week, 80 years of age.

There may be no money in farming, but just the same Wilcox Bros., of Jackson, have purchased 646 acres of land in Clinton County, for $36,000.

Petoskey is anxious to know what the town stands upon, and will bore two thousand feet to discover. Gas, oil, coal or salt thankfully accepted.

An Ann Arbor lad has killed one hundred sparrows with his air-gun, and feels he is a public benefactor whether he gets the one-cent per head bounty or not.

Slocum, of the Holly Advertiser, has begun the publication of a monthly paper named "The American Creamery," devoted to the interests of the creamery business.

Senator Stockbridge has sold "Bell Boy" for thirty thousand dollars. He bought the horse at Palo Alto, Cal., of Senator Stanford, a year ago, for five thousand dollars.

The "domestic assistant" in the family of B. F. Plotts, of Williamston, has pared 3,989 potatoes in 12 weeks past. Is it any wonder our girls refuse to engage in housework?

Michael Scully, C. & G. T. fireman living at Battle Creek, met an awful death there last Thursday, being struck by an engine as he was crossing the track, and instantly killed.

A runaway team scattered $13,000 in gold coin, in custody of the book-keeper of the Jackson iron company, through the streets of Escanaba lately. It was all recovered but $25.

The effect of the decision of most banks in interior towns, not to accept Canadian bank bills except at a ten per cent discount, will be to freeze out Canadian money in this State.

Thomas Glennan, of South Lyon, builder of the new schoolhouse at Pinckney, was at work on the cupola of the building when the scaffold gave way, and he fell to the ground. He was instantly killed.

Saginaw Courier: The land office officials in this city have received notice to get ready to pack up for removal to Reed City, and from that point the records and effects of both offices will be transferred to Grayling.

The Kalamazoo Library fund gets the cash from the forfeited bail bonds of criminals who prefer to leave their bondsmen in the lurch rather than face justice. The fund received one thousand dollars from this source last week.

Wm. Snowden, conductor of a logging train on the Mud Lake branch of the D., B. C. & A. railroad, lost his footing while passing from the forward car of his train to the tender of the engine, and was instantly crushed under the wheels. His home was at Blade River.

It is alleged that the Pembroke Knitting Company, of Battle Creek, is out about $8,000, and those interested are anxious to know if Joseph H. Whipple, president, knows anything about it. He left town the day after he failed of a re-election as president, and has not returned.

Adrian Times: C. Cooper, of Onsted, recently lost one of his valuable bay team, after three days' illness. It is claimed that the cause was feeding oat straw, clogging the stomach. A number of horses have died within a short distance of Onsted, lately, from the same cause.

The Gale plow manufacturing company will go to Lansing if that city will offer sufficient inducements. The firm employ about 700 men, and the Republican thinks if the factory could be secured, it would increase the population of Lansing at least 3,000, and make a big boom in real estate.

The Lansing, St. Johns & Northern railroad company was organized at Lansing last week, with a capital stock of $500,000. The road as projected runs from Lansing to Ithaca, via St. Johns and Maple Rapids. The company mean business, and the work of securing right of way will be begun immediately.

John Phillips, who left Belleville in 1842 in search of his fortune, returned there ten days ago. All his friends except his father gave him up as dead, as he had been heard from but once during his absence. His father left the bulk of his $15,000 estate to this missing son, and John has just returned to claim it.

The Board of Education of this city recommend the establishment of a manual training school here, and ask an appropriation of $60,000 for site, etc. The total estimates for the schools of the city amount to $747,331, a sum rather paralyzing to tax-payers, when added to the estimated expenditures of other "boards."

Clara Deitz, of Sebewaing, confined in the Bay City jail on a charge of burglary, attempted to escape by letting herself down from the window of her room in the third story by means of a rope made of her bedding. The rope broke and she fell about 30 feet, receiving injuries which it is thought may cause death. Her sister, Eva, had attempted to burn the jail, previously.

A scheme to reduce the distance between Lake Superior points and ports on Lake Michigan is being talked up by capitalists. The plan contemplates a canal 40 miles long between Big Bay de Noc in Lake Michigan to South Bay in Lake Superior, which would shorten the vessel route 300 miles and avoid the dangerous passages of the Sault and the Straits of Mackinac. The expense is estimated at $5,000,000.

About six weeks ago Anna Fox, of Ash, Monroe County, eloped with her mother's brother, Wm. Wingard, the pair going to Alliance, Ohio, where they lived as husband and wife. The police followed and arrested them at Canton, whither they had fled, taking them back to Alliance, where they were jailed. They were left alone for a brief period to decide whether they would return to this State without a requisition, and during this interval Wingard shot Anna, and then put a bullet through his own head. A note was left, saying they preferred to die rather than return to Monroe. Both were well-connected, Miss Fox being the daughter of a respectable and wealthy farmer in Ash township.

General.

The National Democratic Convention will be held at St. Louis, June 5th.

W. B. Tascott has been indicted for the murder of millionaire Snell at Chicago.

The fisheries treaty between the United States and Canada has finally been completed, and transmitted to the Senate.

The internal revenue receipts for the first seven months of the current fiscal year show an increase of over $5,000,000.

The sale of the letters and autographs of the late Major Ben: Perley Poore at Boston, occupied three days and netted about $6,500.

W. W. Corcoran, well-known Washington millionaire and philanthropist, and founder of the Corcoran art gallery, is believed to be dying.

The Standard Oil monopoly, started ten years ago with a capital of $1,000,000, now has $150,000,000, and quotes the profits of last year at $25,000,000.

Mrs. Peter Shandreau joined the Salvation Army at Napanee, Canada, and Peter did not like it. In fact he disliked it so much that he shot her and then killed himself.

The chief topic of conversation in social circles at Ottawa is the conversion of Sir John and Lady Macdonald, under the ministrations of the evangelists Crossley and Hunter.

Israel Lucas, defaulting treasurer of Anglaize County, Ohio, who fled to Canada with $31,000 in county funds, has compromised by the restoration of $12,000, a clear profit of $19,000.

The cases of the eight defendants in the wrecked Fidelity Bank case at Cincinnati have been disposed of. Two have been discharged, one is dead, the others have been dismissed.

Fruit-growers have forwarded a petition to Congress asking that the duties now imposed on foreign fruits be retained, for the protection of the fruit industries of California, Florida and other fruit-producing States.

Andrew Carnegie & Co., iron manufacturers of Pittsburg, employ 6,000 men at that place, and the pay roll aggregates $500,000 per month. Their plant covers 200 acres, and they use 22 locomotives in their yards.

The "sugar trust," now been investigated by the Senate law committee, seems to have been organized largely to benefit the Havemeyers, who entered it for $16,000,000 or $17,000,000, the whole trust being $[illegible].

Henry George kicks vigorously against monopolies, etc., but his book, "Progress and Poverty," which has brought him $60,000, is copyrighted, and he wants an international copyright so he can have a monopoly in other countries.

Part of the shipwrecked crew of the ship John T. Berry, burned off the Australian coast, reached San Francisco last week. The crew took to the boats, but only the occupants of one reached a place of safety, after seven days of hunger and thirst. Eleven lives were lost.

Josef Hoffman, the phenomenal boy pianist, who has been delighting and surprising New York audiences by his wonderful playing, is to retire from the stage, owing to failing health. His manager, Abbey, has brought suit for damages for $57,500 against the boy's father.

A "faith cure" physician at Chicago has been indicted by the grand jury for practicing medicine without proper authority in the way of diplomas. Fletcher Benedict, a patient, died from lack of proper treatment, his wife permitting no attendance but that of the faith cure man.

Parties who understand the curiosity of the American people, and are ready to turn an honest penny to catering to it, are negotiating for the purchase of the famous Libby Prison, and its removal to Chicago, where it will be preserved as a relic and placed on exhibition.

Mrs. Josephine Ammon, of Cleveland, was last week released from jail after forty-two days' confinement for contempt of court in refusing to reveal the whereabouts of Josie Blann, alleged to be half-witted, and heiress to thirty-five thousand dollars. And she did not tell, either.

An enormous pocket of quicksand is giving a great deal of trouble at the new water tunnel shaft on the lake shore at Chicago. The surface of the ground in the vicinity of the shaft has sunk several feet. The shaft is 70 feet deep, and though large quantities of sand, dirt and water have been taken out there are no signs of bottom.

The Gloucester, Mass., fishermen declare the rights of American fishermen have been sacrificed to Canadian interests. They object to paying $1.50 for licenses for privileges which they claim were already secured them by the treaty of 1818. On the other hand, a Montreal paper declares the interests of Canada are being abandoned to the United States.

The Reading strike has collapsed, and the starving miners have resumed work in most instances. Some can find no work, their places having been filled. The strike failed entirely in its object, and the men are a great deal worse off than they were before they turned out. It is said Austin Corbin, president of the Reading road, gave $20,000 for the relief of the destitute.

Mrs. D. Erastus Corning, wife of the son of the millionaire shoe manufacturer, of Auburn, N. Y., eloped with a newspaper correspondent named Kurtze, last week, greatly to the consternation of the high social circles in which both parties moved. The couple were pursued, and the recreant wife returned to her home with her husband. The scandal is the outcome of the roller rink furor prevalent a couple of years ago.

George H. Corliss, widely-known inventor and manufacturer, died at Providence, R. I., on the 21st. His death was sudden, though he was 72 years old. He invented the Corliss steam engine, and in 1875 built the famous 1,400 horse-power engine which run all the machinery on exhibition at the centennial exposition. The Corliss works at Providence cover hundreds of acres of land and employ thousands of men.

Express robberies seem transferred, for the nonce, to Arizona. At Stein's Pass, last week, two masked men boarded a passenger train on the Southern Pacific, cut the express car from the train, forced the messenger to open it, and rifled the contents at their leisure. The amount secured is not known, but was very heavy. They made the engineer run the express car and engine down the track a couple of miles, and when they had robbed the car, sent him back for the train

John Mackay and his partner, Flood, of San Francisco, count their losses by the collapse of the wheat deal last winter, and have ceased to be friends. Flood figures his losses at $10,000,000, and blames Mackay, who in turn accuses Flood. The bonanza banker is broken in health, almost blind, and fears he may end his days in an almshouse. Eight years ago his bank had $35,000,000

worth of U. S. bonds in its vaults, and $5,000,000 in gold coin in its trays.

The inquiry of the congressional committee appointed to investigate the Pennsylvania coal strikes, reveals a pitiable condition of affairs. Miners were charged $2.10 per ton for stove coal and had to pay for a certain quantity whether they used it or not. They were charged from 10 to 15 per cent more for goods at the company's stores than the same supplies could be bought for at other shops, and matters were so managed that most of the miners were practically compelled to buy at the company's stores.

A cyclone visited Mt. Vernon, a town on the Louisville & Nashville railroad, in Illinois, on the 19th, literally leveling it to the earth. The court house, postoffice, business blocks and private residences were alike demolished. Thirty dead bodies were taken out of the ruins, and 47 were hurt more or less seriously, some of whom will die from their injuries. The weather was cold, and the hot stoves in the wrecked houses set fire to the debris, adding to the horrors of the situation. The bakeries were burned, and no bread was obtainable. The property loss is heavy, and falls upon proprietors, who were uninsured against storms. One thousand persons are homeless.

Foreign.

The Irish land commission has reduced rents 25 and 40 per cent in Donegal.

Bismarck has submitted a regency bill to the Emperor William, the text of which is not yet made public.

Count Tolstoi, Russian minister of the Interior, submits a bill directly to the Czar, designed to prohibit the peasant proprietors from selling the holdings given them when serfdom was abolished.

The English minister of agriculture says the loss by deficient agricultural values in England is not less than fifty million pounds sterling, and that seven hundred thousand agricultural laborers were idle, while those who had work were receiving greatly reduced wages. Many thousands of acres have gone out of cultivation, and there is a great shrinkage in the number of cattle and sheep.

The American Well Works,

located at Aurora, Ill., are the largest in the world. They manufacture every kind of well machinery and prospect for gas, oil, water, and minerals. In addition to their present productions they are mounting almost all classes of their machinery so that there is no time lost in erecting and moving from one job to another. Their encyclopedia of well-sinking appliances is very complete, which they will mail free on receipt of 25 cents, mailing charges. No one interested in well-sinking and prospecting should be without this book.

A chance of a lifetime! See advertisement of farm for sale by B. J. Culbertson, Charlotte, Mich.

LARGEST AND FINEST STOCK

TREES

FRUIT and Ornamental, Grape Vines, Berry Plants, Shrubs, Roses, etc., etc., at Wholesale and Retail. Catalogues Free.

I. E. ILGENFRITZ & SONS,
MONROE NURSERY, MONROE, MICH.
f25 5t toe

DIAMOND CRYSTAL SALT

The purest, strongest, dryest and whitest salt yet produced; the very best for the table and dairy. One butter maker who made over 14,000 pounds of butter in 1887 and sold it at an average of 30 cents per pound used the Diamond Crystal Salt and pronounced it the best salt he ever used. Many creameries which have used the Diamond Crystal Salt during 1887 say next year they will have no other. There is not one-twenty-fifth part as much lime in it as in the Ashton salt and not one-third as much moisture. The Diamond Crystal Salt is a natural crystal made fine without grinding. All salt is cheap and all can afford the best. Dairy men can't afford to use a salt strongly impregnated with lime, neither can any one afford to use a salt for cooking or table use that contains much lime.

Ask your grocers for this salt, insist upon having it, compare it with the salt you have been using; dissolve each in pure clear water and notice the difference in the solution. One trial will satisfy you that this is the best salt you have ever used. Manufactured only by the

DIAMOND CRYSTAL SALT COMPANY,
St. Clair, Michigan.

AUCTION SALE
—OF—
THOROUGHBRED GUERNSEYS

Of Interest to Dairymen.

I shall offer for sale by auction on
WEDNESDAY, MARCH 14th, 1888,
at my farm, four miles east of Pontiac,
25 HEAD OF GUERNSEY CATTLE.
Terms will be very reasonable.
C. H. GIBBS, Pontiac, Mich.
f25-2t

A FIRST-CLASS FARM FOR SALE.

Contains 208 acres; twenty acres of timber; all tillable land; good buildings; plenty of fruit; well watered on the south side by the Looking Glass River; 60 acres of wheat on the ground. Situated five miles north of the village of Grand Ledge one and a half from Wacousta. For further particulars address F. L. SHUART,
f25-4t Wacousta, Clinton Co., Mich.

BRONZE TURKEYS AND BERKSHIRES
FOR SALE.

Will sell in pairs, single or trios. Write for what you want. Young Berkseires, either sex, or sows in farrow. Bred from the stock of Geo. W. Pinney, Newark, Ohio, and Snell & Son of Ontario. Address WM. GRAHAM,
f25 6t Rochester, Oakland Co., Mich.

To Maple Sugar Makers

A copper evaporator (Cook's Patent) four by fifteen feet, in good condition, for sale cheap. Address W. CLEMENT, Adrian, Mich.
f25-1t

For Sale Cheap.

The Standard-Bred Trotting Stallion
MANCHESTER 3202,

foaled in 1881, sired by Enchanter 468, a son of Administrator 357; dam Oriole by Reveler 3109, will be sold at a bargain if applied for soon. For particulars address
Mrs. JAMES MOORE,
f13.tf Milford. Mich.

FOR SALE.

A three-quarter blood Percheron stallion sired by Imported Duke of Perche. He will be three years old in May and weighs 1,300 lbs.
J. E. ABRAMS,
f18-2t Prospect Lake, Van Buren Co., Mich.

FOR SALE.

The Imported Percheron Stallion Quetzel; now eight years old. For particulars address
18-2t C. S. SMITH, Tilsonburg, Ont.

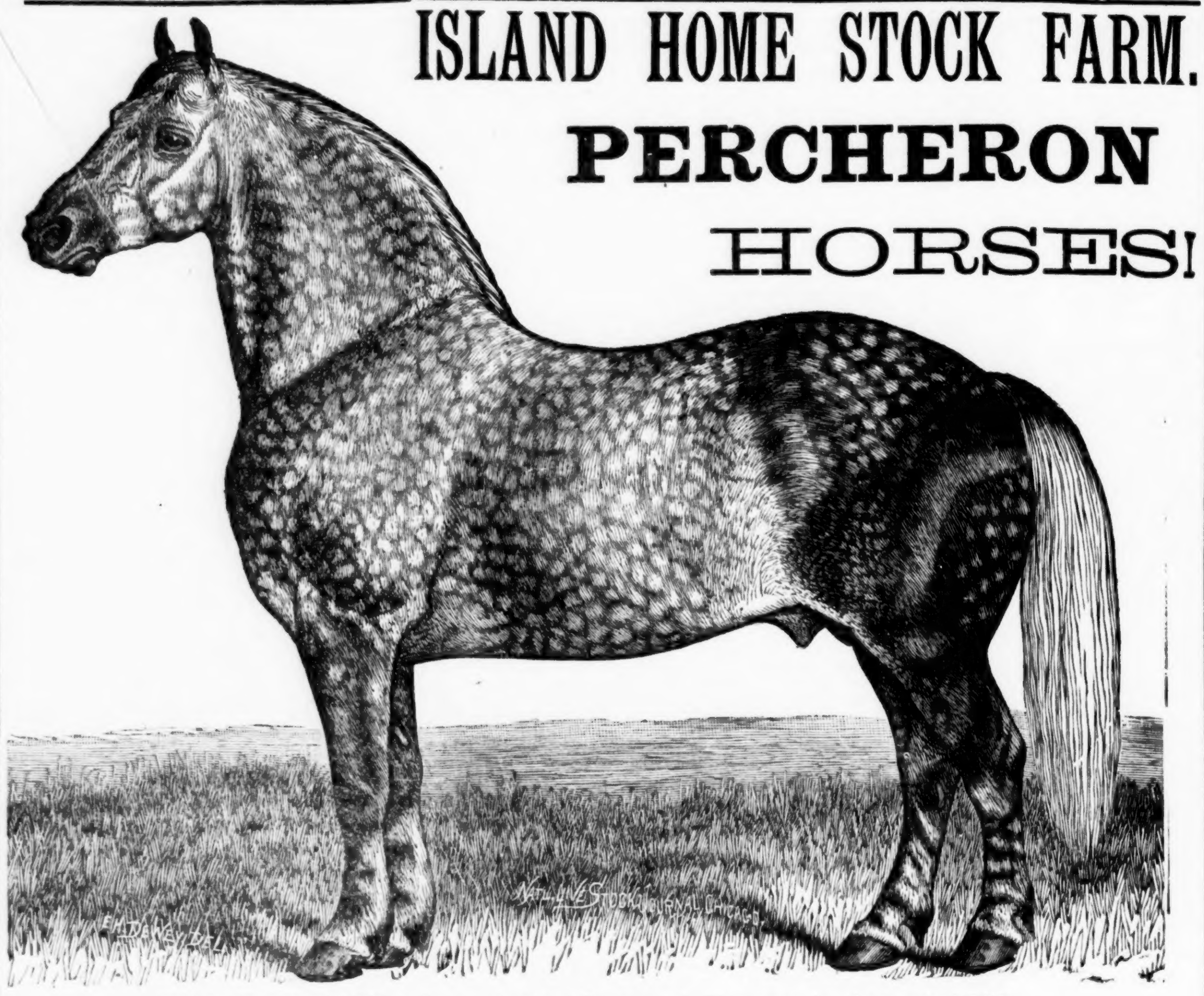
I am running as fast as I can to get a dollar's worth of
Peninsular Carriage Paint
to repaint my old buggy and make it look like new. It is prepared in jet black and eight handsome shades; it dries quickly, with a hard, beautiful finish and needs no rubbing or varnishing. Another dollar will buy
Peninsular Floor Paint,
which dries hard over night and will not wash off.
Peninsular Domestic Paints
for family use are convenient and economical, prepared in twenty fashionable colors.
The PENINSULAR Paints are a great improvement upon all others heretofore offered for sale. Send for Sample Cards.
PENINSULAR WHITE LEAD & COLOR WORKS
Farrand, Williams & Co., Gen'l Agents,
DETROIT, MICH.

For Sale Cheap.

FIFTY HEAD OF
THOROUGHBRED HEREFORDS

Twenty-five heifers and young cows with calves at foot and 25 young bulls from 12 to 18 months old. Stock all first class. Some fine imported cows, richly-bred, the blood of
Old Horace, The Grove 3d and Lord Wilton.
Don't be afraid of fancy prices but come and see the stock or write for prices.
JOHN W. FOSTER,
Manager Crapo Farm,
Swartz Creek, Mich.

ISLAND HOME STOCK FARM.
PERCHERON
HORSES!



Robie 7916 (11887); Imported by Savage & Farnum in August, 1887.

Nearly two hundred horses on hand. Every animal recorded with extended pedigree in the Percheron Stud Books of France and America. Prices reasonable, terms easy and stock guaranteed. Visitors always welcome. Carriages at all trains and steamboats.

COME AND SEE THE ISLAND FARM.

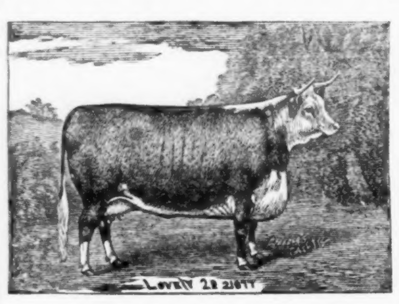
Catalogues free by mail to applicants. Address
SAVAGE & FARNUM,
CAMPAU BUILDING,
Detroit, Mich.

SAVAGE & FARNUM,
Importers and Breeders of
Percheron & French Coach Horses
Grosse Isle, Wayne County, Mich.

See our advertisement of French Coach Horses in another column of this paper.

Merrill & Fifield, Bay City, Mich.

IMPORTERS AND BREEDERS OF
HEREFORD CATTLE!
The Michigan Herd of Prize Winners.



At the head stands Clarence Grove (9709), an imported son of The Grove 3d, dam Ruby by Spartan (5009); assisted by Tom Wilton (9322), a son of the great Lord Wilton and full brother to Mr. Bertram's Sir Wilfred. Such cows as Lovely 2d, Fairy Lass 2d, Grace 3d, Fair Maid 4th by Chancellor 5310, Greenhorn 5th by Fairy Prince, Barcelona Queen by Horace 5th, three grand heifers by Hesiod (6481), and others of equal merit, compose the breeding herd.

For the Next 60 days we will offer
Ten Fine Young Bulls at Farmers' Prices.
FIRST COME, FIRST SERVED!

TO CLOSE OUR PARTNERSHIP

BY APRIL NEXT, WE HAVE DECIDED TO OFFER OUR
CHAMPION GOLD MEDAL STUD.
300 Cleveland Bays and English Shires. 300

All young and vigorous stock, nearly all imported as yearlings and grown upon our farms here therefore thoroughly acclimated. Stallions and mares of all ages and of the Choicest Breeding

Also our Celebrated herd of 150 HOLSTEIN-FRIESIAN CATTLE at very much reduced prices rather than incur the expense and risk of an auction.

A Rare Opportunity is given to secure First-Class Stock at Low Figures. Send for Illustrated Descriptive Pamphlet, and mention this paper.

GEO. E. BROWN & CO., Aurora, Kane Co., Illinois.

PERCHERON HORSES.
FRENCH COACH HORSES.

More Imported and Bred than by any other Eight Establishments.
511 PURE-BREDS Now Actually on Hand.
Experience and Facilities Combined for Furnishing Best Stock of Both Breeds at Reasonable Prices.
Separate Catalogues for each breed, with history of same. Say which is wanted. Address
M. W. DUNHAM, WAYNE, DU PAGE CO., ILLINOIS.

DOOR PRAIRIE LIVE STOCK ASSOCIATION,

DOOR VILLAGE, LA PORTE CO., INDIANA,
IMPORTERS AND BREEDERS
Clydesdales and Cleveland Bays.
Stock selected with reference to *Style, Action* and *Quality*, combined with good pedigrees. *52* imported in July. *100* on hand. *Prices Reasonable.*

FOR SALE.

A highly-bred Shorthorn bull of Bates blood about nine months old, color red, and a fine individual. His breeding is as follows:

Sire—Fennell Duke 2d of Sideview 69731 he by Lord Bates 52432, out of Fennell Duchess 2d of Sideview by Imp. Wild Connaught 34099.
Dam—Fantalina 6th (Vol. 26), by 8th Duke of Vinewood 32445.
2 dam—Fantalini 3d by 8th Duke of Vinewood 32445.
3 dam—Finesse 2d by Millbrook (34851).
4 dam—Fidelity by Desdichado (41325).
5 dam—Frantic 4th by Duke of Oxford (33703).
6 dam—Imp. Frantic by 4th Duke of York (10167).
7 dam—Faith by 4th Duke of Northumberland (3649).
8 dam—Fidget by 2d Earl of Darlington (1945).
9 dam—Fletcher by Son of Young Wynyard (2859), and tracing to a cow descended from James Brown's Red Bull (97) English Herd Book, and bred by John Thompson.

It will be seen that this young bull contains only Bates and Princess blood, the latter being the family from which Mr. Bates selected the bull Belvedere (1706) for use in his herd.

This bull will be sold on reasonable terms if applied for soon. Come and see him. Address
f6- A. A. WOOD, Saline, Mich.

Shorthorn Bulls
FOR SALE.

I have four young Shorthorn bulls, Princess, Rose of Sharon, Bell Duchess, Young Mary, all sired by Gloster Wild Eyes 56239, which will be sold at very reasonable figures. Address
Mrs. JAMES MOORE,
f6-6t MILFORD, MICH.

Shorthorn Bulls For Sale.

Sired by Proud Duke of Fairview 20720, and Lord Barrington Hillhurst 62431, out of Young Mary, Phyllis, Lady Elizabeth, Peri Duchess and Rose of Sharon cows. Also a few cows and heifers. Reliable catalogues always on hand for distribution. WM. CURTIS & SONS,
Addison, Lenawee Co., Mich.
Addison is on the new Michigan and Ohio Railroad. Farm connected with State Telephone

MAPLE SUGAR — NEW SAP SPOUT!
Hang your bucket on the spout. No leakage. Will last a lifetime. Sample by mail 10c in 1c or 2c postage stamps. Manufactured by
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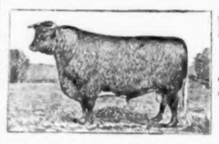

BREEDING
—AND—
MERIT
COMBINED

Will E. Boyden
DELHI MILLS, - - MICH.,
— BREEDER OF —
Shorthorn Cattle

The following families represented in the herd
Cruickshank,
Rose of Sharon,
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Inspection is invited. Stock for sale at reasonable prices. Every animal guaranteed as represented. The prospects for Shorthorns are better to-day than at any time in the past five years. ja31-1y

BLAIR BROS. & CURRY,
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—IMPORTERS OF—
Clydesdale, English Shire and
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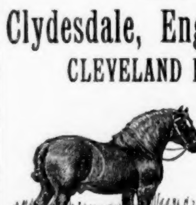

We have a choice lot selected with refrence to style, action, and quality, combined with good pedigrees. We have winners at many of the greatest shows of England, including the great London and the Royal shows. We offer firstclass animals of the choicest breeding at very low prices. Every animal recorded and guaranteed. Visitors welcome. Catalogues on application. Stables in town. An importation just received.

BARGAINS!

If you want Holstein Cattle cheap be sure and write to us. We have four bulls ready for service and a number of females at different ages. All registered and from good strains. Write or come and see them at once as we wish to reduce our herd. Short crops! Dull Markets! Prices to correspond. BERRY & WRIGHT,
n21-tf Somerset Center, Hillsdale Co., Mich

SHORTHORN BULLS
FOR SALE.

Eighteen months old Shorthorn bulls for sale cheap. Also two Clyde stallions, one eight-year-old brown and one three-year-old with white face and white stockings. Sound and cheap. JOHN P. SANBORN,
f13-8t Port Huron, Mich.

HELLO!!!

For the finest poultry, the best butter and the freshest eggs go to
MRS. J. FALTIS & SON,
No. 301 Woodward Avenue, or Stall No. 3 Central Market. Game in season. Telephones: Woodward Avenue, 1,131; Central Market, 1,270.
The highest market price paid for dressed or live poultry, fresh eggs and choice butter.

STOCK AND GRAIN FARM
FOR SALE.

Contains about 250 acres: 170 acres under high state of cultivation, balance in meadow and timber; new house, good fences, three good wells with living water on two sides the farm; new Perkins windmill; situated only two miles southeast of the village of White Pigeon. Price only $50 00 per acre; terms one-half down with five years' time on balance at six per cent interest. Possession given April 1st. For further particulars address
T. E. CLAPP, Banker,
White Pigeon, St. Joseph Co., Mich.

Our New *Non-Freezing* Poultry Waterer won first prize at the great National Show Jan. 18 to 25th Price $2 50. Circulars free. [Pat. applied for.]
S. A. BACON Grand Rapids, Ohio. o31-26t

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— OF —
MICHIGAN BREEDERS

CATTLE.—Shorthorns.

AARON P. BLISS, Swan Creek stock farm, breeder of thoroughbred Shorthorns. Stock for sale. Correspondence solicited and promptly answered. C. S. Baldwin, Manager. P. O. address, Saginaw, Saginaw Co., Mich. au22-26

A. & J. CHANDLER, breeders of Shorthorn cattle, Shropshire sheep and Essex swine. Stock for sale. Correspondence solicited. Jerome

A. D. DeGARMO, Highland, Oakland Co., breeder of Shorthorn Cattle. Stock farm half a mile north of station. Young stock for sale at reasonable prices. my15-6m*

A. J. COOK, Owosso, breeder of Shorthorn Cattle, Poland China swine and Shropshire sheep. Stock for sale. Write for prices and breeding. o20'85tf

A. J. LEELAND, Rose Corners, Oakland Co, breeder of Shorthorn cattle. Stock of both sexes for sale. Correspondence solicited. P. O. address Fenton, Genesee county. je6-1y

A. P. COOK, Brooklyn, Jackson Co., breeder of Shorthorn Cattle. Good families represented. Bull Major Craggs at head of herd. Choice young bulls for sale. A22ly

ARTHUR ANDERSON, Monteith, Allegan Co., breeder of Shorthorn cattle, established 15 years, with Romeo 27750 by 23d Duke of Airdrie and Minnie's Duke by Barrington Duke 3d 37624 at head. Correspondence solicited.

BENJ. F. BATCHELER, Oceola Center, Livingston Co., breeder of Shorthorns of Young Mary and Young Phyllis families, with the Renick Rose of Sharon bull "Sharon Duke of Clark" at the head of herd. Young bulls and heifers for sale. Also registered Merino sheep.

C. F. MOORE, St. Clair, breeder of Shorthorn cattle. Families represented: Barrington Kirklevington, Victoria Duchess, Oxford Vanquish and Tea Rose. Bulls in the herd: Lord Kirklevington of Erie 44182, Grand Duke of Airdrie 62933 and Barrington 78886. j16-1y

C. G. LUCE & SON, Gilead, Branch Co., breeders of Shorthorns. Families in the herd: April Morns, Phyllis, Miss Wiley, Rose of Sharon and Blossoms. Correspondence solicited and promptly answered. d14-6m

CHARLES FISHBECK, Lakeside Stock Farm, Howell, Livingston Co. Breeder of Shorthorns. Herd headed by Bates bull Baronet, Belle Bates 47411, Belle Duchess, Cambria's Victoria, Stapleton Lass, Selinas and Bright Eyes families. Young stock for sale. June3-1y

C. R. BACKUS, Springdale Stock Farm, Williamston, Ingham Co., breeder of thoroughbred Shorthorns, Vermont and Michigan bred Merino Sheep and Percheron horses. Stock for sale. Correspondence solicited. je17-1y

D. M. UHL, Brookside Herd, Ypsilanti. Choice Shorthorns of the best milking and beef making qualities for sale. Correspondence solicited. jny20-1y

E. S. BURNETT & SON, breeders of Shorthorn cattle. All stock registered. Residence, four and a half miles east of Bancroft, Shiawassee Co. Stock for sale.

F. A. BRADEN, Victoria Stock Farm, Bancroft, Shiawassee Co., breeder of pure bred Shorthorns of the Victoria and Stapleton Lass families with Lord Raspberry 2d 48633 at head of herd. Stock for sale je10-1y

GEORGE W. STUART, Grand Blanc, Genesee Co., breeder of thoroughbred Shorthorn Cattle, Registered Merino Sheep, and Jersey Red Swine. Correspondence solicited. ja17-1y*

HENRY BROOKS, Brooks Farm, Wixon, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. o19-1y

HENRY LESSITER, Oakdale Stock Farm, breeder of thoroughbred Shorthorns. Stock for sale. Correspondence promptly answered. P. O. address, Grattan, Kent Co., Mich. ja15-1y

H. H. HINDS, Stanton, Montcalm Co., breeder of Shorthorn Cattle and American Merino Sheep. je27-1y*

JOHN C. SHARP, "Hillside Farm," Jackson. Breeder of Shorthorn cattle and Poland China swine. Families: Peri Duchess, Rose of Sharon, Young Mary, Gwynne, Victorias, etc., with the straight Rose of Sharon bull, "Sharon Duke of Bath No. 64449" at head of herd. Young stock for sale. Correspondence solicited.

JAMES D. BOTSFORD, Osceola, Centre, Livingston Co. Breeder of thoroughbred Shorthorns, registered and grade Merino Sheep. Stock for Sale. June3-1y

JAMES MOORE, Milford, Oakland Co., Mich., breeder of Shorthorn Cattle of leading tribes, herd headed by Gloster Wild Eyes 56239. Also Hambletonian and Percheron horses, Highland Scotch sheep and Jersey Red swine.

JOHN McKAY, Romeo, Macomb Co., breeder of Shorthorn cattle. Young bulls and heifers for sale. Correspondence solicited.

J. E. FISK & SON, Johnstown, Barry County, breeders of Shorthorn cattle, Registered American Merino sheep, and Poland-China swine, Plymouth Rock and Wyandotte fowls. Stock for sale. Correspondence invited. P. O. Bedford, Calhoun Co., Mich.

L. N. OLMSTED, Burr Oak Farm, Muir, Ionia Co., breeder of Shorthorns. Stock for sale. Correspondence solicited. ja1-1y*

M. DAVIDSON, Tecumseh, Lenawee County. breeder of Shorthorn Cattle. A few choice young females for sale. Also some young bulls. Correspondence will receive prompt attention.

N. B. HAYES, Eldorado Stock Farm, breeder of Shorthorns of the Young Mary, Phyllis, etc., families. Young animals for sale. Also breeder of Norman Percheron stock with imp. Eldorado at the head of the stud. Correspondence solicited. P. O. address Muir Ionia Co. d1ly

O. SNOW & SON, Oaklawn Park Stock Farm, Kalamazoo, breeders of thoroughbred Shorthorns. Families represented are Young Marys, Phyllis, Golden Pippin and White Rose. Correspondence promptly answered

S. CHAFFEE, Byron, Shiawassee Co., breeder of Shorthorn cattle, Merino Sheep and Poland China swine All stock recorded. Stock for sale

S. H. ELLINWOOD, Rose Corners, P. O. address Fentonville, Genesee Co., breeder of Shorthorns. Stock of both sexes for sale. Correspondence will receive prompt attention. n26 26

THE COLLEGE FARM, Agricultural College, Mich., breeds Shorthorn cattle, Berkshire and Poland-China swine, Merino and South down sheep. A choice lot of animals always on sale at very reasonable prices. Address Sam'l Johnson, Sup't of the Farm. s28-1y

WM. BALL, Hamburg, Livingston Co., breeder of Shorthorns. Principal families: Rose of Sharon, Young Mary; Young Phyllis and Cruikshank. Also breeder of thoroughbred American Merinos of the best blood as well as the most thoroughly practical.

W. C. WIXOM, Wixom, Oakland Co., breeder of Shorthorn Cattle of the Kirklevington, Hilpa, Flat Creek Marys, Cruikshank, Rose of Sharon, Aylesby Lady, Phyllis, Rosemary, Duchess of Sutherland, Lady Helen, and other families, headed by the pure Bates Barrington bull Barrington Duke 7th No. 72667.

WM. FISHBECK & SON, Howell, breeders of Shorthorn cattle. Principal families: Kirklevington, Darlington, Strawberry and Victoria. Herd headed by the Bates bull 3d Marquis of Longwood (Vol. 33). Stock for sale. Write for prices.

WM. WHITFIELD & SONS, Lakeside Stock Farm, Waterford, Oakland Co., breeders of thoroughbred recorded Shorthorn cattle and Hampshire sheep. Stock for sale. s1-1y

Holstein-Friesians.

CHAS. F. GILLMAN, "Fenfeld Stock Farm" Pewamo. Breeder and dealer in thoroughbred Holstein Friesian Cattle and Merino Sheep. a22ly

C. V. SEELEY, North Farmington, Oakland Co., breeder of Holstein-Friesians. Stock for sale of the famous Ykema family. Ykema 226 (H. F. Herd Book) at head of the herd. Correspondence will receive prompt attention. au10tf

E. R. PHILLIPS, Bay City, breeder and importer of Holstein-Friesian Cattle. Correspondence solicited. Intending purchasers invited to call and inspect stock.

J. M. STERLING, Monroe, breeder of pure Holstein-Friesian cattle. Stock for sale. Correspondence and personal inspection solicited.

W. K. SEXTON, Howell, importer and breeder of thoroughbred Holstein-Friesian Cattle. Stock farm, three miles south. o13-1y

W. L. WEBBER, East Saginaw. Herd mostly imported, selected in Holland for Mr. H. R. Boardman by Mr. Cornelius Baldwin, of Ohio. Choice animals for sale.

Jerseys.

SMITH BROS. Eagle, Meadow Brook herd of Jerseys. Stock of the highest quality and of the best strains. Houdan chickens. s30-1y

W. J. G. DEAN, Hanover, high-class Jerseys of the Rioter-Alphea and Grand Duke Alexis strains. Pedro Star 11336, son of Pedro 3187, at the head of the herd. Registered Merino Sheep. s8-1y

Herefords.

EDWIN PHELPS, Maple Place Farm, Pontiac, Oakland Co., breeder of Hereford Cattle of most popular strains. Waxwork 6320 (6250) at head of herd. Stock of both sexes for sale at reasonable prices. f14-1y

RIVERDALE STOCK FARM, Metamora, Lapeer Co., Hereford Cattle, Merino Sheep, and Berkshire Swine. All stock registered. Correspondence solicited. Address, M. Wickham, Manager.

THOMAS FOSTER, Elm Grove Stock Farm Flint, Genesee Co., breeder of Hereford cattle (Lord Berwick 2d at head), Cotswold and Shropshire Sheep, Berkshire swine, Road and Trotting horses, with stallions Flint and Mambrino Gift, Jr., in the stud, with eleven mares of Mambrino and Hambletonian breeding. Stock for sale. m27-1y

Devons.

R. G. HART, Lapeer, breeder of Percheron and Standard-bred Trotting horses; Devon, Galloway and Hereford cattle; Merino sheep and Cheshire hogs. All stock registered. Farm adjoining city limits; residence, and breeding and sale stables in the city. Come or write me.

Galloways.

GALLOWAY BREEDERS' ASSOCIATION of the State of Michigan. President, R. B. Caruss, St. Johns., Vice President, L. B Townsend, Ionia; Secretary and Treasurer, R. G. Hart Lapeer. Choice recorded stock for sale. Correspondence invited. ja9-1y

R. B. CARUSS, Essex, Clinton Co., St. Johns, P. O. Breeder of Galloway cattle, American Merino sheep and Essex hogs. Correspondence solicited.

JOHN J. BUSH, Lansing, breeder of and dealer in Pure.Bred Galloway Cattle, I have one of the largest and finest bred herds in Michigan to select from. Correspondence solicited.

SHEEP.—Merinos.

A. A. WOOD, Saline, breeder of thoroughbred Merino sheep. A large stock always on hand. Also Poland-China hogs; herd started from those of B.G. Buel, of Little Prairie Ronde, and G. F. Harrington, of Paw Paw. ja17-tf

C. E. LOCKWOOD, Washington, Macomb County, breeder of Registered Merino Sheep of Atwood Stock, descended directly from the Hammond flock. Stock for sale. Correspondence solicited.

E. BURLINGAME & SON, Byron, Shiawassee Co., breeders of registered Merino sheep of Rich blood; also Shorthorn cattle. Stock for sale. Correspondence invited.

F. M. DEAN, Maple Avenue Stock Farm, Pewamo, Ionia Co., breeder and dealer in Improved American Merinos. All stock registered and descended from Vermont flocks. Also registered Poland China Swine.. Stock for sale. Correspondence solicited.

J. A. GIBONEY, Kalamazoo, breeder of registered Merino sheep. Size, form, length and density of fleece specialities. Young stock for sale at low prices. Correspondence solicited. jn10-3m

JAMES McGREGOR & SON, Metamora Lapeer Co., breeders of thoroughbred registered Merino Sheep. Stock for sale. my13-y

J. C. THOMPSON, Romeo, Macomb County breeder of Thoroughbred Registered Merino Sheep; also Poland-China Hogs. Stock for sale Correspondence solicited. may8-1y

J. EVARTS SMITH, Ypsilanti, breeder of thoroughbred Merino Sheep, registered in Vermont Register. Rams and ewes for sale of my own breeding, together with recent selections from some of the best flocks in Vt. Examine before purchasing elsewhere ja31-3m

J. S. WOOD, Saline, Washtenaw Co., breeder of Vermont and Michigan registered thoroughbred Merino Sheep. Stock for sale.

R. W. MILLS, Maple Ave. Stock Farm, Saline, Washtenaw Co., breeder of Vermont registered thoroughbred sheep. Atwood ram Peerless at head of flock. Also breeder of Poland China swine. Correspondence solicited.

R. HATHAWAY, Addison, Lenawee Co., Mich Breeder of thoroughbred American Merino sheep, registered in Vermont and Michigan Registers. Rams and Ewes for sale of my own breeding, together with selections from some of the best flocks in Vermont. Correspondence solicited

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GAVIN LONGMUIR, Bannockburn Stock Farm, Pontiac, Mich., Importer and Breeder of Registered Shropshire Sheep. Stock for sale. Write for particulars. f13-1y.

J. F. RUNDEL, Birmingham, Oakland Co., importer, breeder and dealer in thoroughbred Shropshire sheep. Stock registered. I import my sheep direct from England. Correspondence promptly answered.

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T. A. BIXBY, Lake View Stock Farm, South Haven, breeder of Shropshire Sheep from imported stock. All registered. Largest flock in Western Michigan. Inspection invited. au3-4m

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A. W. COOLEY, Coldwater, Branch Co. breeder of large English Berkshire swine of the largest size and very best strains. Pigs and young breeding stock for sale at reasonable prices. All of my breeders are recorded in the American Berkshire Record. Write for prices.

EZRA BROWN, Englishville, Kent County breeder of Berkshire swine of the best known recorded stock. Stock for sale. s30-26

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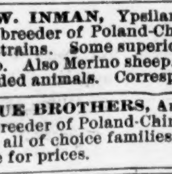

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GEO. R. GREEN, Ravenna, Muskegon Co., breeder of Poland China swine. All stock bred from animals recorded in Ohio Poland-China Record. Write for prices. d5-13

G. F. HARRINGTON, Paw Paw, breeder of pure-bred Poland-Chinas. All stock in Ohio P. C. Record. Breeding stock not akin for sale. Also breeding registered Merino sheep. Correspondence invited.

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W. M. HILBERT, North Lansing, breeder of Small Yorkshire pigs of best known strains of blood. All breeding stock recorded. Stock for sale. my30-1y

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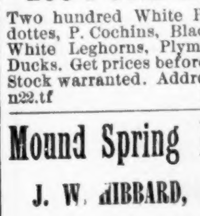

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HOLSTEIN-FRIESIANS!
I have about Twenty head of fine
Cows, Heifers and Calves.
for sale at reasonable prices and on easy terms. Write for description, prices and records, stating what is wanted. A. L. FORBES,
je8-tf Stockbridge, Mich

Poetry.

HAZEL BLOSSOMS.

The summer warmth has left the sky,
The summer songs have died away;
And, withered in the footpaths lie
The fallen leaves, but yesterday
With ruby and with topaz gay.

The grass is browning on the hills;
No pale, belated flowers recall
The astral fringes of the rills,
And drearily the dead vines fall,
Frost-blackened from the roadside wall.

Yet through the gray and sombre wood,
Against the dusk of fir and pine
Last of their floral sisterhood,
The hazel's yellow blossoms shine,
The tawny gold of Afric's mine!

Small beauty hath thy unsung flower,
For spring to own, or summer hail;
But, in the season's saddened hour,
To skies that weep and winds that wail
Its glad surprisals never fail.

O days grown cold! O life grown old!
No rose of June may bloom again;
But, like the hazel's twisted gold,
Through early frost and latter rain
Small hints of summer time remain.

And as within the hazel's bough
A gift of mystic virtue dwells,
That points to golden ores below,
And in dry desert places tells
Where flow unseen the cool, sweet wells.

So, in the wise Diviner's hand,
Be mine the hazel's grateful part,
To feel, beneath a thirsty land,
The living waters thrill and start,
The beating of the rivulet's heart!

Sufficeth me the gift to light
With latest bloom the dark, cold days;
To call some hidden spring to sight
That, in these dry and dusty ways,
Shall sing its pleasant song of praise.

O love! the hazel wand may fail,
But thou canst lend the surer spell,
That, passing over Baca's vale,
Repeats the old-time miracle,
And makes the desert land a well.

—*John Greenleaf Whittier.*

RECONCILIATION.

She stands where ivies cluster green,
A pink bud at her throat,
The gardener seeks her, grave of mien,
Bearing my contrite note.

She breaks the seal—In damask flood
Her color comes and goes—
Nay, do I dream, or has the bud
Burst richly to a rose?

—*American Magazine.*

Miscellaneous.

PARKER O'BRADY'S "IDIOTSYNCRASY."

BY G. L. FURNISS.

"Say, Nora, why can't ye get me into a fine big place like yours?" says I. "The woman I am with is breaking my heart with her nasty particular ways. Five times this morning did I make her bed, and her standing over me, though there's never a soul to see it but herself."

"Oh, you greenhorn you," says Nora. "Barring everything else, you don't suppose Murray Hill folks are going to have a girl about them with a burr on the end of her tongue like you, who says fush for fish, mulk for milk, muss for miss, and the like? No, indeed! You get rid of your County Derry brogue, and then we'll see."

"Faith ain't ye from County Derry yourself?" says I.

"Maybe I am," returns Nora, very scornful; "but I'm not fresh from the ship, spluttering like a heathen, and dressed in a ready-made Queenstown gown shaped like a black bolster with ruffles, am I?"

"'Deed and you are not," says I.

"Maybe you see a look in my eye like I'd just seen a fire engine tearin' by?" continues Nora, with awful sarcasm. "Maybe you think my mouth is hanging open wide enough to swallow a cart-horse, and my hair is combed into a lump?"

"Sure I'm not thinking anything of the kind," I says, in tears. "You're quite the lady, and have got rid of your County Derry ways so complete that I'd never know you for my warm-hearted cousin Nora at all, with your jokes at me and my clothes, and I'll not stay to disgrace ye—"

"Ah, you little omadum!" says she, pushing me back in my chair. "I'm telling you this for your good, and if some one had done the same for me when I landed, it wouldn't have taken me five years—no, not two—to get where I am now."

"And where are ye now?" says I.

"I am a first-class waitress, naming my own terms," says she, proudly; "and the woman don't live that dares to try on any bossing ways with me, I tell you."

"I should think not," says I admiring. "And how did ye do it?"

"Well, the first thing, of course, is to learn your business thoroughly," says she. "And that's easy enough over here, for there's a lot of women who believe in training greenhorns in their ways instead of paying decent wages to experienced help. So all you have to do is to swallow your pride, put up with their foolishness till you've learned all they can teach, and then give notice, and go where you can get more money."

"Sure that seems mean, after all their trouble with you," says I.

"Nonsense!" says Nora, sharply. "They ought to expect it; we all do it. What kind of a woman are you with now?"

"I guess she's one of that same kind," says I, "for she's more ways than a monkey, and is destroyin' me with her notions."

"That's good. And what does she call you?"

"Why, Biddy, of course."

"Oh, 'Biddy, of course,' is it?" says Nora. "That sounds low; but I meant when she's telling her company about your trying tricks—what does she say then?"

"She says the 'new girl,'" says I, surprised. "But how did you know she talked me over with 'em?"

"Oh, that kind of woman always entertains company that way," replied Nora, scornfully. "And does she let you sit down before her?"

"I'd like to see her prevent me," says I, flushing.

"You've got the wrong notion. If she was a real lady she would not allow any such familiarity," said Nora, impressively; "and if you knew more, you wouldn't want 'em to. Intimacy between mistress and maid is undignified, and leads to wrangles, which are low. When I say I rule, I never meant I did it by disobeying orders or contradicting; and yet," she said, meditatively, "it's very few ladies that make me do anything I don't want to."

"Well, then, how do you do it?" I says, fairly puzzled.

"By management," she says. "You see, Bridget, it's pretty much like Mrs. Bishop Wyndam's basement stairs. Cook vowed she wouldn't do them, and I was bound I wouldn't, because it was really cook's place. Well, Mrs. Wyndam sided with cook, and ordered me to do 'em; so I never said a word, but I thought, you won't ask me to do 'em again, my lady—and she didn't."

"And what did ye do?" says I—"leave all the dirt in the corners and smash a banister?"

"I did better that," said Nora. "I took exactly two hours to 'em, though I had to take up the carpet and beeswax the rails to fill in the time. And it happened, Bridget," she added, with a wink—"it happened that Mrs. Wyndam had a lunch party that day which she was very particular about; but of course, being busy over the stairs, I hadn't time to set it out in my usual style, nor could I be expected to remember all she'd told me; likewise I waited at table with a sort of far-away air, broke a dish before the company, and was aggravating to that extent, in a quiet, respectful way, that Mrs. Wyndam could have shaken me with pleasure, being one of your large, imperative women by nature. Well, the next day, when she finished her directions, she says, looking away from me, 'Nora, I've spoken to the laundress, and she will take charge of the basement stairs after this.'"

"Lor'!" said I, "didn't you want to laugh in her face?"

"I did so," says Nora; "but I kept on my usual respectful manner, and only said I thought it might be better, as a waitress really had all she could do to attend to her own pantries and silver. And that's what I mean," she added, "by saying a girl need never do anything she don't want to; let her keep her temper, and prove by some such practical lesson as that how impossible it is for her to do it, and the mistress won't be long in taking the hint."

"Sure, I'd like to take my mistress in hand," says I.

"Wait till you know your trade; for living out is a regular profession to be studied," says Nora. "And never forget to be perfectly respectful in the midst of all your aggravations, for that just drives them wild."

And I have not forgotten. Ask any of the ladies who have given me very fine recommendations who was the best trained servant they ever had, and they'll tell you Parker O'Brady. Ask 'em who was, on the whole, the most aggravating, they,ll tell you Parker O'Brady. Ask 'em why they kept me, they'll say because I knew my duties so thoroughly that either as cook or waitress I was as good as a man. And I think I may say I was quite as good as any man, through natural talent and careful study.

You will perceive I dropped the name of Bridget, with my brogue and brogans, when I left off being "the girl" and rose to be "a maid," selecting Parker as an English-sounding title, suggestive of aristocracy, wealth, and style. Who could fancy a Parker stamping heavily around the table, breathing hard, and leaning on the guests' shoulders to reach the dishes? and who could imagine a Bridget doing anything else? I have never ceased congratulating myself on repairing the injury my parents unthinkingly did me, poor souls!

You will doubtless remark a certain elevation and fluency in my language, which is partly due to one year at a night school, and partly to the perusal of "Lakeside" novels after hours—the latter, I feel, having done the most toward refining my crudities, and giving me glimpses into a higher sphere of life and its requirements, as Mrs. C. O. D. Butterworth observes in the *Twin Brides, or Fate's Toy*. But I digress. You want my views on the mistresses as a class, and you shall have them.

Every thoughtful girl of my profession selects some special variety of this large and unruly portion of society as being easy for her to manage. Some take rich widows, some timid old ladies, while others, again, prefer fiery model housekeepers who show fight, whom it is a credit to any girl to subdue. I prefer brides myself, as their ignorance and inexperience render them more tractable and easy to get the best of.

I speak from experience, having lived with every kind of them—Vassar brides, society brides, artistic brides—of every grade down to the domestic brides, who waste all their time and all their poor young husband's money in getting up economical dishes which no one can eat, and dressing up barrels with enough lace and ribbon to buy a decent piece of real furniture. For five years I've rung the changes on these different types, run their houses for them, left when I got tired of their nonsense, and never met my match until Mrs. Wetmore engaged me for cook and chamber-maid two weeks after she returned from her tour, and settled herself in an expensive apartment on Fifth Avenue. It seemed such a strange combination of duties that I hesitated, until she explained it was her own idea, naming at the same time very high wages; also that the washing was to be put out, and there was to be a butler. Then I accepted at once, having a partiality for butlers as being less interfering than females, and pleasanter company evenings.

As to her "idea," I saw through that at once; it was economy, though she said it was simply "an arrangement to condense her household to the limits of her flat," or apartment, as she called it: a very fine speech, but I was not imposed on. I've heard economy called by finer names than that, but as my wages were all right, I pretended to be duped, as it were.

Where the cheapness came in I could not see, when I'd been over the apartment and seen the butler, for both were very high-priced articles, equally ugly and English, to my notions, and consequently equally stylish and desirable.

As to the kitchen, it contained everything the heart of a cook could desire, and more too, but I particularly like to take the conceit out of my bride at the start by informing her, "I don't see several absolutely necessary articles, but suppose of course she will buy them." It does make them feel so green and young! And when you've made your mistress feel abashed like before your superior knowledge, you've made your first step toward ruling.

To do her justice, I will say that Mrs. Wetmore never showed the least hesitation from the first day to the last, but maintained an awful calm that would have done credit to her grandmother, fairly puzzling me to account for her composure; a slender, delicate creature she was too, with large blue eyes, and a way of looking up at you, appealing like, that was very taking, until you gradually learned that she had no more bend in her than a stair-rod, and was just about as soft and yielding.

I rather fancy Mr. Wetmore has found that out by this time, poor young man, though he seemed crazy about her then; and if ever there is a split in their camp, I bet on her, in spite of his six feet and his soldierly bearing.

The first two weeks passed off easily, Mrs. Wetmore ordering her marketing herself, paying cash for everything. Before she started out each morning she handed me the *menu* for dinner, and that was the last I saw of her till evening, she was so busy finishing the decorations of the apartment, rather knocking my theory of economy in the head by the lavishness of those same.

One remark she did find time for. "Please understand, Parker," she said, in her sweetest tone, "that there are to be no bills run up at the stores. You must have a list ready every morning of the articles needed, but on no account are you to order them yourself."

"Very well, ma'am," I said, respectfully, "and I think it's by far the best way." Here I stopped, for if ever a woman's face expressed, "Who asked for your opinion?" in a well-bred way, it was Mrs. Wetmore's. And it was just that way of looking that made me detest her. Looks can't be taken hold of and answered back, except by other looks, you know, and I'm bound to confess that I never can hope to acquire that woman's art of withering people up to the same extent in sweet silence.

"How old should you say she might be, Baldwin?" I said, as she swept away that morning.

"Well, her manners," says Baldwin, "points towards a hundred or so, while her looks and the admiration all gentlemen gives her suggests twenty—not more."

"Where did she pick up all this housekeeping, do you suppose, Baldwin?" said I. "Who taught her?"

"She's that kind of a female," replied Baldwin, solemnly, polishing the silver, "that if you was to say run a steam-engine, would get right on and run it without any instruction, and with that same coaxing look in her pretty eyes. Maybe you recollect that she was the only one in this establishment that could get the patent lamp to work?"

"What if she was?" says I.

"Nothing," says he, gathering up his silver, "except that she is studying you silently, just as she did the lamp, and when you get to trying some of your dodges she'll just manipulate you a little, and you'll settle down in your proper place in five minutes, like the lamp, and resume work with no more smoke or spluttering."

"'Deed! Mr. Baldwin, it takes more than a chit of a girl to manage me," says I, hotly; "And before two weeks are out she'll find I'm not to be either smiled or stared into doing anything I don't want to. I'll show her!"

"In which case," remarked Baldwin, smiling, "I fancy that she'll show you that your place is situated on the outside of this apartment, and no latch-key provided."

"Oh, you think so?" I said sarcastical.

"I know it," said he, easily; "consequently my advice is, don't go hunting about for grievances; just let things slide along easy."

Wasn't that just like a man? Let things slide along easy!—easy! whether to sit or be sat upon. I rather thought I'd show him I was not quite so easy to manage as a lamp. But the trouble was, I couldn't seem to get a chance to assert myself. Mrs. Wetmore kept on that nasty impervious smile, and simply ignored what I might call my list of minor aggravations, which I tried in their regular order. Finally I produced one of my trumps and played that, hoping to break up her stony calm: I left the pots, pans, boxes, pitchers, plates, etc., that I used about the kitchen all day, so as to destroy that air of neatness so dear to a young matron's heart. This, I felt sure, would bring her out. Well, they staid there three days, horribly in my way, and she never even looked at them till the fourth; then she said, "Cleaning your closets, Parker?"

"Oh, no, ma'am," I said; "Thursday is the day you appointed for that. I keep the things out because it saves trouble to have them ready to my hand. You don't object, ma'am?"

She looked at me a minute thoughtfully, and then she smiled that everlasting smile of hers, saying, blandly: "Not in the least, Parker. As long as everything is so exquisitely clean, I do not care whether you keep the frying-pans on the chairs or not. It must be a nuisance to put things away each time in that horrid closet. I never saw such a mean affair," she cried, popping her head in it with a disgusted air. "It's a disgrace to the builder, and you are very sensible not to use it—very sensible."

Now, do you know, the minute she said that, I felt a violent liking for that closet, and the minute she left I had my things back there in a jiffy. What was the use of making myself miserable if she didn't care? But I didn't understand why she didn't. She was the neatest woman I ever lived with; all her belongings was kept like wax; everything had a box, and every box had a place, and, moreover, was kept in it. Besides, that speech about "keeping things where I pleased, as long as I kept them clean," didn't seem right in the mouth of a bride. Young house-keepers don't feel like that; they're forever fussing about with cute little hooks to hang spoons on, and suggesting how nice it would look if every plate on the dresser had a cup and saucer in front of it, while the blue and yellow bowls alternated. Therefore I knew that speech wasn't her own. She had been put up to it, as I told Baldwin. It couldn't be accounted for unless her mother was teaching her on the sly.

"Her mother died years ago, likewise his," said Baldwin, "so I guess you'll have to lay it to inspiration, if you must rumple yourself up to account for it, though I don't see the necessity. Why can't you let her alone, and be content with high wages, light work, and a mistress who don't object to frying-pans on the chairs?"

"Lor', Baldwin, you talk like a man," said I, contemptuously. "It's a question of principles, not frying-pans, as any one but a man would see."

"Well, being a man, it's natural to talk like one," replied Baldwin. "And as I'm a man who knows a good thing when he sees it, I mean to keep my situation, and have another of your very delicate croquettes."

And that was all I got out of him. But for all that I discovered where Mrs. Wetmore's inspiration came from. And where do you suppose she got it? Out of a book! Smuggled away under her mouchoir case I found it, *The Young Housekeeper's Manual*, with the page turned down at "Hints on the Management of Servants;" and down I sat to read it, and very interesting it was, making me think of the proverb about "old maids' children," it was so scientifically and perfectly unsuitable for everyday use, though reading delightfully. The chapter on servants was specially soothing. The mistress was advised to remember that we were human beings like herself—quite a new view, you see—and to treat us with a judicious mixture of firmness and kindness, coupled with a study of our characters and due allowance for our idiotsyncrasies. When I reached that I flew into the parlor, where Baldwin was taking his ease, the family being at the opera. "There!" I cried, waving the book at him—"there's your paragon's inspiration! And, oh my, Baldwin, ain't it fine to have a young lady making a study of your character and allowances for you idiotsyncrasies? For my part, I never knew I had any. What are they, anyway, Baldwin?"

"I expect you've always heard them called tantrums," he said, dryly.

"Oh, if that's all they are," says I, tossing my head up, "I'll give her a new variety. She'll find she can't match a live girl with a book."

"Maybe she won't confine herself to her printed instructions," says Baldwin, "and she'll get around you—exactly as she made Mr. Wetmore take her to the opera tonight."

"Well, I'm sure that couldn't have been hard," says I, "for when I handed you the *soufle* the shoe was on the other foot—she didn't want to go, and he was set on it."

"Of course," says Baldwin, slapping his knee; "that's where her cuteness came in, Parker, for Mr. W. came home cold and tired, and before he had his soup, said the opera was out of the question on such a beastly night."

"And how did she bring him around?" says I, really curious. "Did she cry? Brides mostly do."

"Cry!" returned Baldwin, contemptuously—"she cry! Not much; nor pout, nor sulk, nor coax. I don't know exactly how she did it, but she played on him like he was a piano. First she agreed with him; then she raised his curiosity by quoting bits from the papers about the opera; then she made him laugh, taking off the prima donna; and the end of it was that he started for the carriage laboring under the delusion that he was the one that wanted to go, and she was very sweet to accompany him. It was beautiful," he cried, "beautiful, to see her bring him around."

"Beautiful! I call it hypocritical," I said, tired of his nonsense; "and if I wanted my husband to do anything, and he wouldn't do it, I wouldn't act a lot of lies; I'd—"

"You'd just hit him on the head with a rolling-pin," broke in Baldwin, "and he'd just give you a black eye, and spend his evening at the club, which would be a great deal better than Mrs. Wetmore's style—wouldn't it, Parker?"

I never could tell whether Baldwin was in earnest or not, so I dropped the subject, and he read me the society notes till the Wetmores came back to supper with a lot of friends.

As it happened, the next day was the 1st of the month, and right after breakfast Baldwin informed me I was to go to the library; Mrs. Wetmore wanted me. Naturally I suspected something was wrong; for, following her manual, her habit was to give her orders in the kitchen, and sort of snoop around the closets every morning; so as I went in I was prepared inwardly to give her as good as she gave, though outwardly I was decorous as a clean pillow-sham. I found her writing in her everlasting account-book, dressed to kill in a lovely gown, a little bunch of keys at her belt, her pocket-book and letters on her desk, all very comfortable, quite the model housekeeper.

"Good-morning, Parker," says she, looking up very affably. "Do you recollect the directions I gave you in regard to ordering goods from the trades-people?"

"Certainly, ma'am."

"Then please look these over, and tell me how it happens they were contracted," she said, handing me a small bundle of order checks. "You will see they amount to about $27. Did you order them, or has the grocer made a mistake?"

All this time she was smiling and staring at me, perfectly unembarrassed, though I felt far from easy.

"So far as I can remember, ma'am," I said, glancing at the items, and trying to imitate her coolness, "I did order all these things. You see, they was wanted immediate to go into dishes for some of your little dinner parties, and you was out, and I couldn't wait till you got back, so, as I have always been accustomed—"

"And why did you not mention these articles," she interrupted, blandly, "when I took your list on those mornings? Did you forget?"

"Why, yes, 'm I suppose I did," I replied, with dignity. "You will notice, ma'am, they were chiefly spices and garnishings."

"No, I had not observed that," she said, taking up the bills again. "Let me see: four pounds black Hamburg grapes—do you spice or garnish with them, Parker? Four bottles best cooking sherry yesterday, also four pounds best candied citron. What did we have four pounds of citron in yesterday, Parker?"

"Some of it was in the little cakes you had with the ices, ma'am."

"Then there is doubtless a good deal left," she said, fixing her eyes on me till I grew scarlet; the fact being that I had given the grapes, wine and citron to my sister for her christening party.

"Yes, 'm, there is," I replied, bracing myself for a battle, and rather glad of it too. "Would you like to see it?"

"Not at all," she said, coolly, "but since there is so much in the house, you may use it up in four large loaves of wedding-cake; we have all the other ingredients, and the sooner it is made the better, as Mr. Wetmore likes it old. The four bottles of sherry will make just about enough jelly to serve with the cream at my musical to-morrow, so you may make that to-day also. I had intended ordering it from Pursell," she continued, carelessly, "but I really prefer your jelly to his, and we have the wine in the house, so it is better on all accounts. And now, in regard to these bills, I have paid them, and notified the tradespeople that I would not be responsible for any orders unless they were accompanied by a note from me. You may go, Parker."

And I went—to find Baldwin doubled up in a chair, absolutely purple with suppressed laughter.

"Beautiful!" he gasped. "Ain't she a woman with a head-piece? Ain't she cute? I say, if you give me the money, I'll go out and get them for you, Parker."

"Get what?"

"That sherry and stuff that you've got to buy to replace what you boned from Mrs. Wetmore," he said, with a wink.

"Boned indeed!" I cried. "What a vulgar word to use to me! And don't crow too soon, Baldwin. The goods I shall of course return, as I never meant anything beyond borrowing them; but with all her smartness, my lady don't suspect that they are not in the larder this minute."

"Oh! you think she doesn't, do you?" inquired Baldwin, sarcastically.

"Why, of course I do."

"Well, then, let me tell you, Parker, that she does know it very well," he returned, "and that's what breaks me up: the cuteness of the way she got round it, has everything replaced without any fuss or scene, and all the tradespeople shut off before you could say Jack Robinson. Ah! Parker, Parker, you'd better own you are beaten."

"I won't, and I ain't," I snapped, jamming on my hat. "You wait a bit; I've a plan that I rather think will make us about even." With that I rushed out to buy the hateful things, and a pretty big hole they made in my wages, as you may fancy. I told Mary Ann that she needn't expect any Christmas presents from me after the handsome thing I did for her party. Time after time I'd done that same thing, and never once been found out, and to think of that chit of a girl being smart enough to do it!—it was maddening. But I had my plan, and mighty smart I thought it then; though being over my temper now, I've changed my mind.

You see, two days after her musical, Mrs. Wetmore was to give a very swell dinner party: only ten guests, but they were the very best, and the chief one was to be Lord Willoughby Stewart, who Baldwin said was making a great stir in society, and was almost fought for by the ladies. I guess that was Baldwin's chaff, though, for I saw him come in, and lord or no, he reminded me of a sucking pig at holiday-time, he was that blond and well scrubbed. Well, Mrs. Wetmore was very fussy over the *menu*, as you may imagine. It was very simple, but every dish was to be perfect of its kind, and it included four of my specialties—amber soup, lobster cutlets, roast woodcock, and Italian cream. My cousin Tim, head cook at the Union Club, taught me these, and I can beat him on them if I choose; but on this occasion I didn't choose, for my plan, of course, was to spoil her dinner for her. A sort of an object lesson, you see; as much as to say, "You haul me over the coals and interfere with my perquisites, I ruin your dinner; therefore, you'd better keep me in a good humor—two and two make four." So on the eventful day I forgot to say we were out of anchovy paste for the cutlets, and pink gelatine for the cream; and as Mrs. Wetmore lunched out to give me a free day, and I was not allowed to order any groceries myself, that spoiled two dishes at one swoop, and no blame to me. After that I tied up my forehead (which is a great mental brace, so to speak, when a girl is having an idiotsyncrasy), and completed the details of my plan, which required thought; for I didn't want to do anything that couldn't be explained away by a slip of memory and a headache.

Well, if I hadn't known, I'd have sworn that dinner came from a caterer in a tin box, it was just that kind of bad. The soup was clear as wine, but lukewarm and unseasoned; the cutlets were insipid, the entrees likewise tasteless, the woodcock was dry as sawdust, while all the vegetables would have been delicious if they'd only had salt in 'em; lastly, the Italian cream, which should have appeared in a lovely form, with pink wine jelly at the bottom and curdled cream on top, and been beautiful as well as good, went on a kind of soft custard. Not having the pink gelatine, I couldn't make the right kind, so I chose that receipt as being the furthest off from the Italian cream Mrs. Wetmore expected to see brought in.

I fairly laughed as I pictured her dismay when she saw Baldwin serving that sloppy stuff. He vowed he was afraid to take it in for fear the guests should think it was lather and ask for razors.

"Well, how did the dinner go off?" says I, when he comes out from serving coffee; "and how did his lordship like the dessert?"

"He never eats made desserts, it seems," says Baldwin. "When I left he was going in for the fruit and praising the products of America."

"And Mrs. Wetmore," I asked, maliciously, "is she pleased?"

"She's uncommon brilliant and gay," he replied, with his aggravating drawl. "His lordship is regularly fascinated with her. It's a pity," he added, with a sigh, "that she should have took up a stockbroker like Wetmore before she'd seen some real English quality, ain't it, Parker?"

"Why don't you poison Wetmore's coffee," says I, sneering, "so she might marry his lordship? But tell me, should you say the dinner suited her?"

"I think," says Baldwin, "you might smash every one of her Dresden coffee-cups when she had company, and her good-breeding would not allow her to move a muscle, consequently I can't say. She will probably give you her opinion to-morrow. So cheer up, Parker!" says he, chuckling to himself; "and if you haven't quite worked off all your bile on the dinner, why don't you fry the beefsteak, and boil the tea for breakfast, as a sort of P. P. C."

"And what's a P. P. C.?" I demanded.

"P. P. C. is a French short-cut," says he, very airily. "When a party is going to leave a place in a hurry he just writes P. P. C.—*Partant Pour Canada*, which his friends seeing on his card take to mean, in a joking way, no time here, and a lot of other things. French," said Baldwin, pulling up his collar, "is a very peculiar language in the way of having a great deal of meaning packed up in a few words."

"You're very smart," says I, "but I am not going anywhere; so I won't need your P. P. C."

"We'll see about that to-morrow, Parker," says he.

And we did see. Mrs. Wetmore sent for me directly after breakfast, and I found her in the library, the same as before. I wonder if she knew how nervous it made me to be called out of the kitchen?

"Good morning, Parker," says she, sweetly. "Your month is up to-day, is it not?"

"Yes 'm," said I, disappointed to think she was only going to pay me, without speaking of the dinner.

"Very good," says she; "here are your wages for the month, also for one week in lieu of the customary notice, and from to-day I shall not require your services, Parker."

"May I ask your reason, ma'am?" I says, utterly dumfounded.

"I am not satisfied with your cooking," she replied, blandly. "The dinner was a lamentable failure last night; I cannot risk another."

"Well, ma'am, the cream was not what I wish," I said, getting my weapon ready; "but the gelatine was forgotten, and as you forbade me to order anything, no matter what happened, I really couldn't help it."

"That was not any worse than anything else," she interrupted. "The whole affair was insipid, tasteless, flat. The fact is, Parker," she said, with a pitying smile, "you are not a born cook. You have been carefully taught, but you lack the discrimination, or the palate, or whatever it is called, that is necessary. However, it is useless to discuss the matter, since you cannot help it. There is your reference, and I will say good-by now, Parker, trusting you will be more fortunate in your next place." And with that she walked out of the room, leaving me to pick up my reference, without the satisfaction of having said anything I meant to, the truth being, her awful composure just destroyed my nerve. I wasn't like myself when her eye was on me, realizing that the woman who could control herself so easy wouldn't be likely to be afraid of me.

"Well, I suppose you flattened her out, and gave her as good as she sent?" said Baldwin, as I stood waiting for the expressman an hour later.

"I didn't consider her worth my notice," says I, "especially as I never meant to stay where they was so poor they was afraid to keep bills running. The idea! All nice people has bills everywhere. And you'll perceive she gave me a reference, for all her airs."

"Did she? Let's read it together you and me, sitting on the trunk," says Baldwin, in that confidential deluding way of his. And this was what we read:

"Parker O'Brady has lived with me one month as cook and chamber-maid. She is honest, clean, and sober.

EDITH WETMORE.

"January Sixteenth."

"Beautiful!" cried Baldwin; "honest, clean, and sober, are you, Parker? Let me congratulate you. You've worked pretty hard for that note, harder than if you hadn't taken a spite against Mrs. Wetmore, and had just done your work as well as you know how. And what have you made?"

"Made a fool of myself, I expect," said I.

"I ex—er— Well, no, Parker, we won't say that," said Baldwin, rolling his eyes at me with a killing air, "because I'm very sorry to see you go, Parker. You're a very pretty girl, even when you're in one of your idiotsyncrasies. So we'll call it a mistake."

But for all that, as I walked away, thinking everything over, I had to confess I had made a fool of myself, and you will doubtless agree.

How to Act on Occurrence of Fire.

Fire requires air; therefore on its appearance every effort should be made to exclude air. Shut all doors and windows. By this means fire may be confined to a single room for a sufficient period to enable all the inmates to be aroused and escape; but, if the doors and windows are thrown open, the fanning of the wind and the draught will instantly cause the flames to increase with extraordinary rapidity. It must never be forgotten that the most precious moments are at the commencement of the fire, and not a single second of time should be lost in tackling it. In a room, a table-cloth can be so used as to smother a large sheet of flame, and a cushion may serve to beat it out; a coat or anything similar may be used with an equally successful result. The great point is presence of mind—calmness in danger—action guided by reason and thought. In all large houses buckets of water should be placed on every landing, a little salt being put into the water. Always endeavor to attack the bed of a fire; if you cannot extinguish a fire, shut the window, and be sure to shut the door when making good your retreat. A wet silk handkerchief tied over the eyes and nose will make breathing possible in the midst of much smoke, and a blanket wetted and wrapped around the body will enable a person to pass through a sheet of flame in comparative safety.

850,000 Grape Vines, 100 Varieties,

advertised in another column by Lewis Roesch, of Fredonia, N. Y., whose push and enterprise for a series of years as a propagator of grape vines is fast becoming known the country over; and whose sterling integrity and strict personal attention to the needs of his patrons, have secured to him a foremost position among the nurserymen of this country. His New Illustrated Catalogue, containing reliable descriptions of a very extensive assortment of grape vines and small fruits, suitable to all sections of the country, also directions and suggestions, invaluable to cultivators and others, resulting from a large and varied experience, is mailed free upon application.

Curious Discoveries.

Some wood-cutters in the forest of Drommling made a strange discovery. They began to fell a venerable oak, which they soon found to be quite hollow. Being half decayed, it speedily came to the ground with a crash, disclosing a skeleton in excellent preservation; even the boots, which came above the knee, were perfect. By its side were a powder-horn, a porcelain pipe bowl and a silver watch. The teeth were perfect. It would seem to be the skeleton of a man between thirty and forty years of age. It is conjectured that, while engaged in hunting, he climbed the tree for some purpose and slipped into the hollow trunk, from which there was no release, and probably died of starvation.

Another mystery was found in the heart of an oak. From a tree of this kind a large block about eighteen inches in diameter, that had been knocking about in various yards and wood sheds, was split up lately, and in it was found an auger hole about three-fourths of an inch in size, containing a bunch of human hair done up in a piece of printed paper. The hair was near the center of the block and fastened in with a piece of pine plug. It was apparently put in when the tree was quite small, as the tree had grown over the plug to a distance of about four inches, with the grain perfectly smooth and straight.

A natural curiosity was shown in a timber merchant's workshop. This was the nest and skeleton of a bird imbedded in a piece of beech. The timber seemed quite sound all around the cavity, and there was no sign of any aperture into it; but the timber being sawn up, the nest with the bird sitting upon it was found.

The nest appeared to be built with mud, and the bird resembled a titmouse. Probably at the lopping of a branch a cavity was formed and the outside subsequently grown over; but how the bird was inclosed seems difficult to imagine. In the centre of a log of Honduras mahogany the saw revealed a large piece of honeycomb. The finder says the wax with the cells was hard and resembled in color the appearance of a mummy. The remains of the bees were incrusted in the wax. Another log of mahogany was being cut into veneers by a cabinetmaker, when his attention was attracted by the appearance of a remarkable and striking profile of her majesty in a knot of the wood. The likeness was so true that all who saw it acknowledged the resemblance.—*Chambers' Journal.*

Erection of the New Harlem River Bridge at 181st Street.

The series of bridges of various epochs and types of construction that cross the River Thames have long been one of the most impressive features of London. From a similar standpoint, and as far as bridge architecture is concerned, the Harlem River, more diminutive than the Thames, bids fair to fill a similar *role* in the city of New York. The High Bridge, carrying the water of the Croton aqueduct across the river, has long been a famous structure, though in the present age it must take a lower position in the engineering world. A short distance from it, where One Hundred and Eighty-first Street intersects the Harlem River, the greatest of the bridges over the river is rapidly approaching completion.

At this point the Harlem has high banks, the west being the more precipitous of two. On the eastern side the low shore runs back a short distance and then somewhat more gradually rises to a height corresponding to the other side. On the low ground on the east bank of the river the New York City and Northern and the New York Central railroads have their tracks. This character of the ground necessitated the peculiar disposition of the bridge which we are about to describe.

It is a combined masonry, steel, and wrought iron structure, affording a carriage-way and foot walks. It includes in general two approaches and the bridge proper. The total length, including these approaches from Tenth Avenue on the west to Aqueduct Avenue on the east, is 2,380 feet.

The general plan may be thus stated: The length is divided into three parts. Each approach is 660 feet long. Two steel arches and a central stone pier fill up the remaining 1,060 feet left between the approaches. The western approach is for 260 feet in earth supported by stone-work. The next 400 feet are in masonry three semi-circular arches of 69 feet span, carried on piers, with some viaduct or solid work completing this portion. On the eastern side a similar division exists. In the approach 300 feet are in earth supported by masonry, while the remaining 360 feet in masonry include one seven-centered 56 feet arch, three semi-circular 60-feet arches. In common with the bridge the approaches furnish a clear width of 80 feet, 50 of which is devoted to the central carriageway, and 30 feet are equally divided between the two sidewalks.

Remarkable Rescues By St. Bernard Dogs.

It is only within the last few days that particulars have been published in the Swiss papers of a brave rescue effected on Mont St. Bernard on the night of the last Sunday in November. While a violent snow storm was in progress, Grand, the manager of the hospice, noticed that his own special dog that was alone with him in his room became very restless, and made signs to him to go out. He took the lantern and fog horn and went out on the mountain, the dog leading him. In a very short time he heard a call and groaning, and, helped by the dog, dug out of the snow an Italian, whom he carried on his back into the hospice. The rescued man stated that his father, two brothers, and another Italian, all journeying home with him over the pass, lay buried in the snow. He had pushed on to obtain help, but had been overpowered by the storm. Grand made ready and went out again. This second search was more tedious and led him further away, but at last the barking of the dog announced a discovery. It was the Italian stranger who was now saved and carried up to the hospice. A third time Grand and his dog sallied out into the tempest, and after a quarter of an hour's search found the others, near where the second man had been discovered. They were quite buried under the snow and almost insensible. He took the most feeble on his shoulders, and with difficulty conducted the others to the hospice. It was now past midnight, and his toilsome task had occupied Grand over four hours, in a blinding snow storm.—*London Times.*

SHE "DISPLAINS" IT.

"Had, too!"
"Hadn't, neither!"
So contended Bess and May—
Neighbor children who were boasting
Of their grandmammas one day.

"Had, too!"
"Hadn't, neither!"
All the difference begun
By May's saying she'd two grandmas,
While poor Bess had only one.

"Had, too!"
"Hadn't neither!"
Tossing curls, and kinks of friz,
"How could you have two grandmothers
When just one is all there is?"

"Had, too!"
"Hadn't neither!"
'Cause of you had two," said Bess,
"You'd displain it!" Then May answered:
"My grandmas were twins, I dess!"
—*James Whitcomb Riley.*

A Plucky Mule.

Sometimes the mule is called upon for special service, requiring qualities for which he does not generally receive credit. The lines were tightening around Charlestown when Admiral Dahlgren's fleet began operations in the harbor, and rendered it practicable for the troops on shore to advance with some hope of being able to hold the points previously untenable. During the night a detachment of the Tenth corps dislodged a picket post on the eastern end of Morris island, and when daylight came had thrown up quite a formidable beginning for a field work. But the place was within easy range of Fort Sumpter and Battery Wagner, and every Confederate gun that could be brought to bear began to drop shell into the earthwork. It was thought that an attempt was about to be made to carry the place by assault, and, while there were men enough to hold it, they were a little short of ammunition. The only practicable road was a mile and a half of hard, smooth sand beach, commanded from end to end by the Confederate batteries.

But there was a combination in the Federal Camp that was equal to the emergency; namely, a fleet mule and a plucky driver. the mule is mentioned first, only because he has long since kicked his last kick, but the driver, if he still survives, will acknowledge that without the mule he could not have done what he did. It may be assumed that the mule had a good feed of oats before he was called upon to run the gauntlet, and possibly the driver, too, may then have felt justified in fortifying the inner man. Be that as it may, just before noon a few boxes of ammunition were thrown into the lightest available wagon, and, after looking the arness over carefully, the driver took his seat in the shelter of the sand hills. The mule stood with his extensive ears raking aft and a wicked gleam in his eye, as if the oats were beginning to rise into his brain.

"Good-by, boys! G'up, mule!" and the equipage started down through the dry sand to the hard level of the beach. Mule shook his head and executed a demi-volt when he felt the damp sand under his feet, but driver soothed him with endearing words. It had not yet dawned upon the Confederates that the expedition was intended for the relief of the garrison. But presently the gleam of intelligence was indicated with a rush in the shape of a shell from the southeast angle of Sumpter. It struck the water fairly in line, ricocheted and burst over in the marsh, but it was the signal for action. Up went the whip and the mule gathered his mighty hind legs under him. For a moment it was uncertain whether he was going to kick or run, but a few remarks from the driver convinced him that there was demand for forward movement, so he "lit out for all he was worth." At least thirty guns commanded that stretch of beach, and they pounded away as fast as they could be fired. Now and then a shell would burst rather too near the mule's ears for comfort, and he would sheer violently and try to make for home. But the gallant driver plied the lash, and held him to his work.

At length a ten inch shell tore up the beach and exploded so near that the mule was entirely demoralized; but not so his driver. Leaping down from his seat he caught the mule by the head, backed him rapidly round once or twice,, and was off again on the keen jump before the gunners could get his range as a fixed object. On he went, and at last dashed into the redoubt; but there was no shelter in it for the mule. His ears waved conspicuously above the low-lying parapet.

The ammunition boxes were tumbled out unceremoniously, and the mule's nose pointed for home. With the lightened load and the prospects of unlimited fodder, he beat the previous record. But the Confederate artillerists were on their metal now. They had failed to stop the supplies, but their hearts burned for revenge. Their shots now came more from the rear, and bets were freely offered with no takers, on what the result would be should the mule have a fair chance to kick a ten inch shell, as it were, "on the fly." The crescendo scream of a shell chasing him up the beach, lent wings to his heels, and he fairly flew toward the sheltering sand hills. There were only a few more rods to be covered, when some careful gunner made a close calculation as to the lengthening range, and pulled his lanyard almost in the nick of time. The hugh mass of iron struck the beach, as it seemed to the anxious spectators, exactly behind the wagon, and the next instant nothing was to be seen there but a cloud of white smoke and brown sand. In an instant, however, this cleared away, and the mule was seen vigorously reducing to kindling wood what was left of the quartermaster's wagon.

And the driver, where is he? Well, he was apparently knocked over by the explosion, but he got on his feet in a moment, and, having cut the traces, was on the mule's back in another, waving his hat in response to cheers that rolled across the water from Yankee blue jackets, from Confederate garrisons, and from the dark blue masses that crowned the distant sand dunes.

It is a pity that the driver's name has not been preserved, for his daring act certainly deserves recognition and reward. Perhaps he received both, but the writer has been unable to find mention of the fact.—*Adrian Rexford in American Magazine.*

Niagara Landlord—You look tired and thirsty. Won't you have a glass of water? Cautious Visitor (who has read about the Falls)—How much is it?

"Take off That Hat."

Before the curtain rung up on "McKenna's Flirtation," last evening, cries of "take off your hat," low at first but finally swelling into a fortissmo yell, came from the upper gallery. The victim of this hilarity was a Boston type of commercial traveler, who sat calmly and serenely in a prominent seat in the parquette with his head covered with a silk hat of unusual proportions. The gentleman from Boston seemed not to hear the jeers of the gallery and only removed his hat after the noise had subsided, and he was left conqueror of the field. One would upon first thought, greatly blame the tourist for his apparent lack of gentility, but when all the returns are in that feeling of blame will soften into one of admiration and pity. The young man paid the usual price for a parquette seat, and was therefore entitled to the performance, but upon reaching his seat he found seated directly in front of him a woman gorgeously attired and wearing upon her head a covering so huge that the traveler's view of the stage was entirely obstructed. In that soft-toned voice, so peculiar to the cultured Bostonian, he quietly said to the young woman: "Madame, I beg your pardon, but will you kindly remove your hat, that I may see the stage, for which privilege I have paid my money."

With a look of disgust the offended young woman turned upon him and requested that he mind his business.

Without another word the gentleman from the Hub fished his high hat from under the seat and placed it jauntily upon his head. The gallery gods saw it: "Take it off!" "Take off that hat!" "Shoot the tile!" "Get onto the dicer," rang out from the tiers. The high hat remained. 'Take off that hat!" The gaily dressed woman became nervous. She did not see the drummer behind her and supposed that it was her hat which was causing the commotion.

Reaching tenderly forward the tourist in a tone of compassion whispered in her indignant ear: "Don't mind them, madame; they'll stop when the performance begins."

This settled it. With a snort of intense rage and a violent shake of her abundant crinoline the young woman marched out of the house, the drummer removed his hat, up went the curtain and the man from Boston saw all that was worth seeing, which was not much.—*Jackson Citizen.*

Electric "Sunstroke."

M. Defontaine, doctor in chief of the Creusot Steel Works, in a paper read before the French Society of Surgeons, states that workmen employed in operating the electric forges at Creusot are subject to a form of sunstroke, which he attributes to the intense light radiated from the focus of the forge. Ordinary arc lamps are incapable of producing such effects, as the light is not sufficiently intense, but these forges emit a light of more than 10,000 candles from a few square centimeters of surface, producing on men exposed to their glare physiological consequences previously unheard of. Frequently, after two or three hours work, the men complain of pains more or less intense in the neck, the face and the forehead, simultaneously with which the color of the skin is changed to a reddish brown. Further, in spite of the precaution taken by the men of shielding their eyes with dark glasses, the retina is affected to such a degree that for some minutes after ceasing work the operatives are totally blind to all objects illumined with common daylight, nor is perfect vision restored till nearly an hour after. The conjunctiva are irritated, and remain in a state of congestion for forty-eight hours, and this is accompanied by a painful feeling, as of some foreign body introduced under the eyelids, The secretion of tears is argumented, a constant flow being kept up for twenty-four hours, during which the patient suffers from insomnia, due to pain and the abnormal flow of tears, and possibly also to fever. During the following days the skin peels off the face and neck, which become of a deep red color, fading away about the first day. In case of ordinary sunstroke, heat may have some influence, but in those considered above, the whole effect is due solely to the action of intense light.

Prize Essays on Newspapers.

The souvenir dancing orders of the Albany Printing Pressmen's union contain the following contribution from "a printer's devil," which is too funny for publication in so called comic papers; at least, they seldom have such genuine humor. It is entitled a "Prize Essay on Newspapers."

Newspapers is called vehicles of information.

Reporters is what is called "the staff"—so many of them being "sticks." They work hard—at refreshment bars.

Proof readers is men what spoils the punctuation of compositors. They spell a word one way today and another way tomorrow. They think they be intelligent persons; compositors think different.

Compositors is men as sets up the types—and sometimes they drinks. Compositors is very steady men when they is sober—which they seldom is when they can help it.

Editors is men what knows everything in the heavens above and the earth beneath. They is writers who dosen't write anything whatsoever. They is the biggest men you ever see.

Managers is men as takes in the tin and gives patent medicine "ads" tops of columns next to readin' matter thirty-seven columns out of thirty-two.

Proprietors ain't anybody. They ain't ever seen.

Printers' devils is the most important persons in a printin' office. They does the hardest work and gets the least pay.

Pressmen is—well, there wouldn't be no newspapers, nor circus bills, without pressmen to print 'em.

Feeders is men what feeds on the fat of the land.

If I ever start a paper of my own I'll call it the "Umbrella." Everybody will take it.

I heard the foreman tell this funny story to one of the "staff" the other day. It must have been funny, 'cause they both laughed. This is the story: "A gentleman was promenading the street with a little boy at his side, when the little fellow cried out, 'O, pa! there goes an editor!' 'Hush! hush! said the father, 'don't make sport of the poor man—God only knows what you may come to yet!'"

Georgia's Moonshiners.

Mr. T. L. Grant, who recently consumed a week in searching some of the Georgia mountains for illicit stills, said to the editor of the Athens *Banner-Watchman*:—"If you want to see poverty and wretchedness in their worst form you must visit the class that goes to make up the mountain moonshiners. Of course, there are exceptions even to this rule, and occasionally a prosperous and well to do farmer is guilty of thus violating the laws, but I am speaking of the illicit distillers as a class. Their houses are generally built of logs and are devoid of every comfort. A clearing of a few acres surrounds the cabin, on which the owner raises a meagre crop of corn. These cabins can hardly be called houses, but they are rather huts, such as the prosperous negro in the lower counties would refuse to occupy.

Dnring my day's ride I saw more than one of these shanties—occupied by a gaunt mountaineer, an angular, sallow-faced woman and a great swarm of children—the chimney to which had half fallen down, and the cracks between the logs, instead of being stopped with clay, as is customary, were stopped by ramming green pine brush between them, affording a very poor protection against the cutting mountain blasts. It is a mystery that these people do not freeze to death during the cold weather.

"The plowing, field and farm work is usually done by the women, very few families own even a scraggy mountain pony, and the plowing is generally done by a little steer or bull calf hitched to a plow. The women do the most laborious work, and are truly objects of pity. You often see two or three of these stout able bodied men lounging about the yard in blissful idleness while the poor wife and mother not only cooks and washes and attends to her numerous family of children, but also helps to make and gather the crop, which crop, when harvested, her liege lord forthwith proceeds to boil into mean liquor and drink it up. I saw several really pretty girls in these wretched huts, who, if they had the advantages of wealth and refinement, would rank as belles; but the hard life they are obliged to lead quickly transforms them into old women. I cannot imagine a harder life than that led by the wife of one of these poverty stricken and thriftless mountaineers.

"To satisfy myself I visited several of these cabins and talked with the inmates. I did not see a cooking stove in any of them, the vessels in which the meals were prepared being a pot, a frying pan and a kettle. Many of the houses have only one room, and in this the entire family eat, sleep and work. These people are, however, very hospitable, and if they have but a crust of bread will divide it with a stranger and also share their scant bedding with him on the coldest night.

"I particularly inquired of the women their sentiments in regard to the operating of illicit stills. I found them as much opposed to this business as any one could be. More than one wife remarked to me that she would be thankful indeed to see the last illicit still in the county destroyed, as the business had entailed more trouble upon the helpless women and children in the mountains than everything else combined. They said these moonshine stills were using all the corn, and actually taking bread out of the mouths of their people. Not a tenth part of the whiskey thus made is sold and the money devoted to buying comforts for the distiller's family.

"The men who make this whiskey, together with their friends, drink it up. It encourages drunkenness, thriftlessness, and cruelty, and the women and children are the principal sufferers thereby. There is not more corn grown in these mountain coves than is sufficient to furnish bread to the population, and there is not a spare grain to be made up in whiskey.

That Noble Animal Man.

Dearly beloved, it is natural for weak, finite man to turn to the clown for funny things, but really some of the funniest things you read fall from the pen of a wise man. Now read this—I don't know who wrote it. I find it in a "religio-philosophical" paper, but if it dosen't make you smile, you are devoid of the sixth sense: "When one comes in sight of the nobler side of humanity it is no longer a surprise that Christ suffered martyrdom for the race." Now, it was a man who wrote that; no woman ever said such a thing; it was a man, and if that man goes to heaven he will be bitterly disappointed if a delegation of angels and all the apostles do not meet him ten miles outside the gate with an address of welcome and the freedom of the city in a gold box. We are a nice lot of fellows for a God to suffer martyrdom for. Says this same complacent man:—"Human beings are all right; we are simply darkened by the shadow of a social system that offers a premium upon our worst traits, and deliberately crushes the nobler part of us." Oh, yes, we are all right, aren't we? We are naturally, preternaturally, supernaturally angelicaly good, but the shadow of a social system "offers premiums" and "crushes" us; a right healthy "shadow" that combines the functions of a country fair and a stone breaker. How good we are by nature! You have to teach the lisping child his prayers, but he learns to lie naturally at home, and learns to swear the first day he goes to school. He hates his lessons and he loves to fish. He playes "hookey" and runs away from Sunday school even as he runs to the circus. The man forgets the text before the sermon is half through and he forgets the sermon the next day, but he remembers every word of a vile story fifty years. He growls about the water rate, but pays for his whiskey without a murmer. The State has to keep up whipping-posts to keep him from beating his wife; it mantains almhouses for his neglected parents and asylums for his abandoned children; it builds jails to keep him from stealing, penitentiaries to keep him honest, gallows to keep him from murdering, and but for the terror of hell fire he wouldn't try to go to heaven. Oh, yes, man, generally considered, is a sweet bird, and when we come to look at it, the race conferred an undying honor upon its Savior in permitting Him to become a martyr for a crowd of such exalted beings. All that ails us is the "shadow of a social system" that we—by the way, who established that social system—the angels, or these magnificent "human beings" with a trunk full of "nobler part?"

VARIETIES.

HOW THE OLD THING IS WORKED.—When George Pearson, the governor's private secretary, was a green and callow minor clerk in one of the legislative bodies, he had charge of all the petitions presented praying for the passage of this or that bill. One day a legislator said:

"George, have you any petitions with a long list of signatures?"

"Yes," said George, "here is one with about four thousand names signed to it."

"Let me have it," said the legislator. "I want to use it."

"Oh, no," said George, I couldn't do that. It wouldn't be square."

"The——you say. Well, I'll see about that," and the legislator went away. Pretty soon he returned with an order for that particular petition, which was given him. Ripping the long list of names from the petition he pasted another and totally dissimilar petition at the head, slyly winked at the youth from Mercer and said:

"That is how the old thing is worked, George."

Ten minutes afterwards the legislator was on his feet with "Mr. Speaker, I present the petition of 4,000 citizens of Blank County praying for the passage of an act entitled an act, etc."

Mr. Pearson would probably know better now.

"Now, lookee here," said old Farmer Clovertop, confidentially, to one of the young lady clerks in the suit department of a New York dry goods shop, "I want you to kind o' help me out a little on pickin out a dress for my wife—one o' the best wimmen on this created airth. Yes, she is! I ain't been in Noo York before in ten year, an' Hanner'll natchelly ixpect me to bring 'er somethin', an' I'm natchelly a-goin to do it.

"I want to take Hanner a real nice dress, made up in good style, an' yit not too showy. I'll jist tell you a little how she looks an' you figger out the gown from that. She's ruther short, with red hair an' blue eyes an' sandy complected, and she weighs adzactly 249 pounds an' blue's her fav'rite color. She's 58 years old, a-goin' on to 59.

"Now I read in a paper that I bought on the train, that the decoletty dresses was all the rage this winter, an' I made up my mind right there that a decoletty dress was the kind that Hanner should have, so you fix up a nice one—something that'll do to wear to meetin' of a Sunday, an' to singing school, an' —— what you snickerin' at, young woman?"

MADE A NARROW ESCAPE.—A physician who had attended a man during several weeks of illness, called one day and presented his bill.

"I can't pay this," said the ex-patient.

"Why? It's correct."

"I don't doubt that, but I haven't any money. Had to pay a life-insurance assessment this morning and it took every cent I had."

"What, is your life insured?"

"Yes, and at one time when I did not expect to live but a few hours longer I told my wife to see that you were paid just as soon as the company paid the amount of the insurance."

"My dear man," the doctor suggestively replied, "I wish I had known that. I think I would have gotten my money."

A NEW KIND OF BUTCHER.—"Is this meat tender?" asked a red-faced woman at the butcher-shop.

"No, ma'am," replied the proprietor; "I'm sorry to say it is rather tough."

"But it is fresh, I suppose?"

"On the contrary, if my sense of smell is an unerring guide, it is slightly tainted."

"H'm! Got any good sweet butter?"

"Sorry to say our butter is pretty rank."

"And your cheese?"

"About as tasteless as chalk."

The woman looked at him with alarm, rushed out, and told the policeman that there was a crazy man in there.

"So?" said the policeman. "Been telling you his meat is tough, and his butter is strong, and his cheese insipid, eh! I thought likely. He ain't crazy. He began the year with a vow to tell the truth. He has tried it one week, and says if he can keep out of the almshouse he'll try it a day or two longer."

"THE PAINT HAD DRIED."—There is a story told in the French war office to the effect that for ten years a soldier was stationed in the passage leading to the minister's private apartments with orders not to let people touch the walls. But no one seemed to understand why this was done. Now, a new minister of an inquisitive turn of mind determined to find out the explanation of a circumstance that his fifty predecessors had never remarked. But no one could give him any light, not even the chief clerks, nor the subordinates who had been in service half a century. But a certain doorkeeper, an old fellow with a good memory, recollected that on a certain occasion a soldier was placed there because the walls had been painted and the minister's wife had got a spot on her dress. The paint had dried, but the sentinel had been left.

A SQUEALER.—"I greatly dislike," said a Dakota minister one Sunday, after the singing of the first hymn, "to make any personal allusions from the pulpit, but I feel as if a certain occurrence demanded a word. I refer to the case of Brother Hopkins, who lost $10 on old Royal George the running horse, at the county fair last week, and got mad, and set up a howl about fraud, and tried to clean out the whole committee and soforth. It was in poor taste and deserves the strongest denunciation. I suppose I might also add, by way of example," continued the good man, as he turned over the leaves searching for the text, "that I was backing Royal George to the tune of $30 myself, but when I lost I didn't go around roaring as if I had lost a right leg."

"JULIET," said Romeo, looking up with a troubled voice on his brow, "I see here among my bills one for $63 for those Christmas presents your mother sent you, one for $85 for the one your father sent you, another for $110 for the gold watch your Uncle George gave you, and sundry smaller bills for various presents sent you by other relatives. May I ask, in the name of sweet Saint Gall, why these bills are sent to me? How is it, my soul?" "Oh, Romeo," she exclaimed impatiently, "it's all right, only you can't understand these things. Our family is so large, you know, that we just organized a Christmas trust this year. See?" And Romeo said he thought he could, dimly.

PROPRIETOR Kansas 'Hotel—"Have the waiter gentlemen had their dinner yet?"

Head Waiter—"Yes, sah."

"Has the professor of cooking saved out all he wants for his family and friends?"

"Yes, sah."

"Did the upstairs ladies and the stable gentlemen have all they wanted?"

"Yes, sah."

"Is there anything left?"

"A little, sah."

"Well, call in the boarders."

Chaff.

Young Popinjay complains that he has been to so many fashionable pink dinners lately that it is beginning to affect the complexion of his nose.

Irate Merchant (to clerk caressing his daughter)—Young man, you are not hired for that kind of work. Clerk—That's so; I'm doing it for nothing.

A physician described a certain church as dying of the "foot-and-mouth disease;" the members spent so much time going about and talking against each other.

Eve was in one respect the luckiest woman that ever lived. Adam never turned from the breakfast table with "I wish I could taste the old-fashioned cooking of my mother."

Leap year is a sort of wild delusion anyway. The pretty girl has never any use for it, and the homely one is afraid to take advantage of its privileges for fear she will be rejected.

A good habit for some people to cultivate is the habit of silence. Under some conditions a man can make more noise in the world by keeping his mouth shut than any other way.

A Syracuse dry goods merchant has posted a placard containing the following on his store door: "Don't try to open this door, I am Sick, and when I am Well I will be able to Open it Myself."

"Why, Franky," exclaimed a mother at the summer boarding-house, "I never knew you to ask for a second piece of pie at home." "I knew 'twant no use," said Franky, as he proceeded with pie-eating.

"Johnny, you may give me the name of some wild flower," said the teacher in botany. Johnny thought awhile and then said: "Well, I reckon Injun meal comes about as near being wild flour as anything I know of."

"What would you do if mamma should die?" she pathetically asked her little three-year-old. "I don't know," remarked the infant with downcast eye and melancholy voice, "I s'pose I'd have to spank myself."

Mr. Jinks (to landlady)—What kind of a duck did you say this was, Mrs. Dinkly? Landlady—I didn't say. I simply ordered a duck from the butcher's. Mr. Jinks (struggling with a second joint)—I think he has sent you a decoy duck.

Mr. Johnsing (speaking, has risen to go, after having made a tender of his hand to Miss Tompkins, who shows some natural hesitation—so unexpected, you know).—Well, Miss M'Nervy, I'd like to get an answer right now, as dere's another young 'ooman waiting to hear from me.

Wealthy Floridian—Here we are, wreathed in orange blossoms, and the birds singing in every breeze. What could be lovelier in January? New York Girl (28 and desperate)—Just one orange-blossom wreath, and Mendelssohn's march rippling through the perfumed air.

"I don't see why you should sneer at my engagement ring," said the fair girl, with a flush of indignation on her cheek. "It is a great deal prettier than the one you wore three years ago, and haven't worn since!" "My dear," replied her friend, with a cool, far-away look in her voice; "not prettier, but quite as pretty. It is the same ring."

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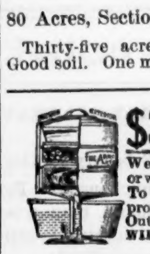

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no28.13t

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MICHIGAN CENTRAL

The "Niagara Falls Route."

Depot foot of Third street. Ticket offices, 66 Woodward avenue, corner of Jefferson avenue, Merrill block, and at depot. All trains arrive and depart on Central Standard time.

Chicago Trains.	Leave, going west.	Arrive, from west.
New York Limit'd Exp.	$1.30 p m	$10.45 p m
Mail, via Main & Air line	*7.00 a m	*5.00 p m
Day Express	*9.10 a m	*6.45 p m
Kal. & 3 Rivers Accom'n	*4.00 p m	*11.50 a m
Evening Express	$8.00 p m	$7.30 a m
Pacific Express	$10.15 p m	$6.00 a m
GRAND RAPIDS TRAINS.		
Day Express	*9.10 a m	*6.45 p m
Grand Rapids Express	*4.00 p m	*11.50 a m
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SAGINAW AND BAY CITY TRAINS.		
Alpena and Mackinaw	*8.35 a m	*9.10 p m
Mack'aw & Marq'tte Ex.	$5.40 p m	$11.00 a m
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Southern Express	$8.25 a m	$9.10a m
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Buffalo and Toronto Trains.	Leave, going east.	Arrive from east.
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$Daily. *Except Sunday. †Except Saturday. ‡Except Monday.

CHAS. A. WARREN, City P. & T. Agt, Detroit. Nov.20, 1887.
O. W. RUGGLES, Gen'l P. & T. Agt., Chicago, Ill.

Lake Shore & Mich. Southern R'y.

Trains run on Central Standard Time.

	Depart.	Arrive.
Cleveland, Buffalo, Chicago & Cincinnati Express	7:20 a m	6:40 p m
Chicago, Toledo & Cincinnati Express	6:10 p m	10:15 a m
Toledo, Cleveland, Buffalo & Columbus Express	2:45 p m	5:25 p m

The 5:25 p m train will arrive, and the 2:45 p m train depart from the Third street depot. Other trains will arrive and depart from the Brush street depot. The 2:45 p m train leaves daily; all others daily except Sunday.

Up-town ticket office No. 66 Woodward Ave. cor. Jefferson, Merrill block.

Detroit, Grand Haven & Milwaukee.

Depot foot of Brush Street. Trains run by Central Standard Time. In effect Feb. 12, 1888.

	Depart.	Arrive.
*Morning Express	6:50 a m	*12:00 n'n
*Through Mail	10:20 a m	*1:50 p m
Grand Rapids Express	4:30 p m	*9 45 p m
†Chicago Ex with sleep'r	8:00 p m	†8:00 a m

* Daily, Sundays excepted. † Daily.

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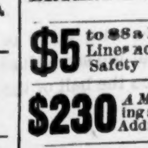

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Veterinary Department

Conducted by Prof. Robert Jennings, Veterinary Surgeon. Professional advice through the columns of the Michigan Farmer to all regular subscribers Free. The full name and address will be necessary that we may identify them as subscribers. The symptoms should be accurately described to ensure correct treatment. No questions answered professionally by mail unless accompanied by a fee of one dollar. Private address, No. 201 First St., Detroit, Mich.

Trembles in Sheep.

PLAINWELL Jan. 30, 1888.

Veterinary Editor of the Michigan Farmer.

DEAR SIR:—I have lately lost two of my best ewes. I have Navin's stock book, also *Western Rural* stock book, but found nothing to hit the case. They were four and five years old, on upland tame pasture all summer, always in good order; this winter in good shelter; run out to stalks once per day; stalks free from smut and good; hay nights and no grain; had fed a few beat roots. Symptoms: First stay behind, tremble at times all over, whether standing or laying down, but quiet; got weaker in their hind parts; when laying down would hate to get up, or up would hate to lie down; lasted about two weeks on each. On opening them found the head all right, liver all right, very full gall; both had twin lambs to be dropped on March 1st. Lambs were all right, but lots of bunches scattered all over the inside of the bag containing the lambs, about the size of walnuts, not bunched together, but two or three inches apart. On one there were more than 30 of them. Sticking fast to inside skin or bag not touching the lambs. Outside of said bunches were of a pink fleshy color, inside of same were of a rotten liver color. Now is that natural in a healthy sheep? Or I would like to know what was the cause of their death, both being quite fleshy and had always done well, and both were well bred Merinos. A. S. H.

Answer.—The trouble with your ewes is a disease known as trembles, caused by cold at a time when the animals are suffering from a deficiency of food and a want of proper protection. The cold chills the sheep, and sets them shivering (trembling), driving the blood from the surface to the vital organs, causing sometimes congestion of the lungs, or liver, and impairing the digestive organs. The remedy: Proper care for their comfort in severe weather, with the best nourishing food to be obtained. Your autopsy reveals no marked pathological changes. The bunches on the inside of the uterus are the cottyledons natural to ruminants.

A Suspicious Case.

GASPORT, N. Y., Feb. 13, 1888.

Veterinary Editor of the Miceigan Farmer..

DEAR SIR:—I have a bay horse, eight years old, that was taken with distemper about a year ago and was also taken with strangles while being driven. I put him in pasture and two weeks afterward I found him hardly able to stand; he had a swelling on the left side of his neck, about 10 inches below the ear, and also on his throat between the jaws; he could not lower his head, and had apparently not eaten anything for some time; he was so weak and breathed so hard I could scarcely get him to the barn. A local veterinary lanced the swelling under the jaw and I poulticed the other one until it came to a head. The swellings both healed up about three months afterwards, but he has discharged from the right nostril ever since. The discharge was at first of a greenish color, then of a yellow and now it is considerably lighter. He eats and drinks well, but he is in poor condition. What can I do for him? E. HUNT.

Answer.—The symptoms and alterations taking place are too much complicated to enable us to even guess at the nature of the disease without an examination. It would be well, as a precautionary measure, to keep him from contact with other horses until you have an opportunity of having the animal examined by an experienced veterinary surgeon. It is quite possible the disease may be glanders. The disease is communicated from one animal to another by innoculation. You should handle him with great care, as glanders can be communicated to man as well as animals.

No Diagnosis.

VERMONTVILLE, Feb 15, 1888.

Veterinary Editor of the Michigan Farmer.

DEAR SIR:—One of my neighbors has a flock of sheep affected in a peculiar way, and if you can, by the poor description I am able to give, tell what it is will be pleased. One was taken first alone and died in three or four days; then two more taken in the same way; had been sick three days when I saw them, and we thought one was getting slightly better. They first show a disposition to separate from flock and appear half blind, and the two I saw were very lame in front foot or leg, but I could see nothing the matter with the foot or leg. Showed no disposition to lie down, and when started went in a staggering circular way, showing shortness of breath. I noticed their breath was fetid, eyes looked dull with eyelids drooping. E.

Answer.—Symptoms given do not justify an attempt at diagnosing the disease. Would advise you to call a competent veterinary surgeon to examine them, and determine the character of the disease.

Castrating Ecraseur.

DUNDEE, Feb. 14, 1888.

Veterinary Editor of the Michigan Farmer.

DEAR SIR:—Not finding the prices of the ecraseur in your paper, I write for information. E. A. ROGERS.

Answer.—The price of the ecraseur varies from $10 to $30. Many finely polished instruments in imitation of the best ecrascurs are in the market, and sold at a low prices. The safety of the instrument is not in the finish (though that catches the eye), but in the perfect working of the chain; that faulty the instrument is worthless. A safe instrument may be obtained at from $15 to $20.

Garget in the Ewe.

IONIA, Feb. 21, 1888.

Veterinary Editor of the Michigan Farmer.

What can I do for ewes having caked bags three or four days before lambing? Lambs all strong and healthy, but cannot get the milk started from the bag to teat. I have used rubber tube to probe the teat, also breast pump after bathing with hot water and salt for 24 hours, but cannot get it started. Bag soft, plenty of milk, and very large bag. Have been feeding turnips, bran and barley at night, with hay straw morning or at noon; ewes in good, thriving condition; plenty of exercise, salt and sulphur when they choose; plenty of water. J. CORBITT.

Answer.—Bathe the udder with water as hot as the ewe will bear it; at the same time manipulate the teats between the ball of the thumb and fingers of the right hand, which will sometimes start the flow of milk. Then leave her alone with her lamb; several hours afterwards, she still refusing to nurse the lamb, take it away and apply the following: Spirits of camphor, two ounces; tincture lobelia, half an ounce; tincture arnica, one ounce; mix and apply twice a day, fomenting the udder previous to its application each time. If the udder is hard or lumpy, foment it well with hot lard. Give internally one ounce epsom salts dissolved in warm water, add one drachm Jamaica ginger root, pulverized, and give at one dose. Cold fomentations instead of hot in some cases have been quite successful.

Spring Halt in Horses.

ROCHESTER, Feb. 13, 1888.

Veterinary Editor of the Michigan Farmer.

DEAR SIR:—Can springhalt in a horse be cured? What are the symptoms when first coming on? What is good for it if it can be cured? SUBSCRIBER.

Answer.—Springhalt is an incurable disease. Its cause has not yet been satisfactorily demonstrated.

Epizootic Again on Deck—The Local Fire Department Badly Crippled.

Pittsburg Leader, Feb. 19th, 1888.

At the present time the disease known among horsemen as the epizootic influenza that has been prevailing for several months among the horses of the two cities, is now rapidly increasing and very likely to become epidemic. This disease made its first noticeable appearance in this city in 1872. The following explanation of the character of the disease and its causes was given a *Leader* representative yesterday by Dr. R. Jennings, Jr., the well known veterinary surgeon of this city, (Pittsburg) who is also surgeon of the fire department, and has had many cases consequently on hand. Said the doctor: "In our inferior animals the term epizootic is used to indicate the same class of diseases known as epidemic in the human family. Catarrh or influenza, strangles, or any other disease communicated through the agency of the atmosphere, is usually attended with more or less fever, often of a low typhoid character, requiring a sustaining course of medication rather than that of depletion so generally practiced by the nonprofessional, and attended by fearful mortality. Twenty-five years ago this disease was known as pinkeye. In that day it was generally fatal under the popular treatment of the time. It attacks indiscriminately horses of every description and age; the young and old, the strong and the weak, under any and every circumstance whether in the well regulated stable or in the open field. The causes are evidently due to some poisonous principle existing in the air to which all alike are exposed. Some animals are more susceptible than others, a few escape with a light attack and a few are exempt. The disease usually is typhoid in its character, the treatment must be of a sustaining character, thus assisting nature to throw off the disease."

Cows for Butter or Cheese.

At the Farmers' Institute held at Utica, N. Y., recently, F. D. Douglas, in a paper on dairying, said that the first thing a dairyman should do is test his cows, and become familiar with the characteristics of his milk. He explained the system of testing used by him, and the class of cows most advantageous for cheese or butter-making. In the former a milk richer in caseine is needed. A cow which is valuable as a cheese-maker is not valuable as a butter-maker. These facts he illustrated by figures based on his experience with his own herds. He advocated a mutual exchange among the dairymen of New York, so that those in the cheese or milk business should get cows suitable for their purpose; and butter makers also. The speaker then illustrated the detriment by loss of manure and improper feeding. It is not only necessary to stock a dairy, and to feed the cattle, but to feed them the best food, keep them in clean, light and warm quarters and give them pure and clean water.

In reply to a question by Hon. Josiah Shull, Mr. Douglas said that a herd of butter cows would not make as good cheese cows.

Prof. Roberts disagreed with this, claiming that a good butter cow made a good cheese cow.

Col. Curtis, of Kirby Homestead, claimed that while a good butter cow made a good cheese cow, a good cheese cow was not so valuable for butter making. He stated that the first and foremost essential for success in dairying was to keep the cattle in absolute comfort all the year round.

AT a recent farmers' institute at the east, a very observing and reliable farmer said he had never known a single instance where a farmer had made a practice of giving his note for purchases who did not finally become insolvent. In view of the exceedingly frequent practice prevalent in the farming community of giving notes for articles of all sorts purchased at public sales this is somewhat startling, but it may be true.

Consumption Surely Cured.

To the Editor:—

Please inform your readers that I have a positive remedy for the above named disease. By its timely use thousands of hopeless cases have been permanently cured. I shall be glad to send two bottles of my remedy FREE to any one of your readers who have consumption if they will send me their Express and P. O. address.

Respectfully,

T.A. SLOCUM, M. C., 181 Pearl St., New York

Commercial.

DETROIT WHOLESALE MARKET.

DETROIT, February 25, 1888.

FLOUR.—Quiet and unchanged. Flour seems to be in better demand than wheat, and shippers are taking it in fair quantities. Quotations on car lots are as follows:

Michigan roller process	3 85 @4 00
Michigan patents	4 35 @4 50
Minnesota, bakers	4 25 @4 40
Minnesota, patents	4 65 @4 75
Rye	3 40 @3 50
Low grades	2 35 @3 00

WHEAT.—The market yesterday closed firm after showing some weakness early in the day. Crop prospects in the northwest are regarded as unfavorable, and there was quite active buying in consequence. Chicago, New York, and St. Louis all closed at an advance. Liverpool was quiet and not much doing. Closing prices were as follows: No. 1 white, 85¼c; No. 2 red, 85; No. 3 red, 82c. In futures No. 2 red for May delivery sold at 87⅜c, and June at 87¼c.

CORN.—Quiet and steady at 51¼c ℔ bu. for No. 2, and 51¼c for No. ? yellow.

OATS.—Quoted at 35¼c for No. 2 white, 33¼c for No. 2 mixed, and 35c for light mixed. Market steady.

BARLEY.—Market dull and lower. No. 2 is selling at $1 55@1 57 ℔ cental, and No. 3 at $1 42@1 45. Choice sells at $1 65 ℔ cental.

FEED.—By the car-load $18 ℔ ton is quoted for bran. Middlings quoted at $18@20 ℔ ton. Market firm.

CLOVER SEED.—Prime spot is offer d freely at $3 85 ℔ bu., a decline of 15c during the week. No. 2 selling at $3 55.

TIMOTHY SEED.—Prime is in fair demand and steady at $2 65@2 70 ℔ bu. State seed is a little lower.

RYE.—Quoted at 60@65c ℔ bu. in bagged lots. Car-loads are quoted at 67@68c ℔ bu.

BUTTER.—Market firmer, and values on some grades higher. Creamery has advanced, and is quoted at 28@30c ℔ lb.; dairy packed firm at 20@22c for good to choice, and 1@2c higher can be obtained for extra fine packages. Roll butter is steady, choice lots selling at 18@20c ℔ lb., and fair to good at 15@17c ℔ lb. Receipts are only of moderate dimensions, and the market is firm on all good stock.

CHEESE.—Market unchanged and prices steady at 12@12½c for Michigan full creams; Ohio, 10½@11c; New York, 12½@13c; skims, 9@10c for choice.

EGGS.—Receipts of fresh have been free, and prices have declined. Now quoted at 18@18½c ℔ doz. Limed are quoted at 12@15c ℔ doz., and slow of sale.

FOREIGN FRUITS.—Lemons, Messinas, ℔ box, $3 00@3 50; oranges, Floridas, ℔ box $3 25@4 50; cocoanuts, ℔ 100, $5 00@5 50; bananas, yellow, ℔ bunch, $2@3. Figs, 11@12c for layers, 14@16c for fancy; Malaga grapes, $5 75@6 ℔ keg of 55 lbs.

BEESWAX.—Steady at 25@30c ℔ lb., as to quality. Supply fair.

HONEY.—Market dull; now quoted at 17@18c for choice comb and 11@12½c for extracted.

BEANS.—Quoted at $2 60 ℔ bu. in car lots for city picked mediums. From store prices are $2 65@2 75 ℔ bu. Unpicked, $1 60@2 10. Foreign quoted at $2 50 ℔ bu.

DRIED APPLES.—Market active at 5@6c for common, and 8@10c for evaporated. Demand improving.

SALT.—Michigan, 80c per bbl. in car lots or 90c in 10-bbl. lots; eastern, 75@80c; dairy, $2 10 per bbl.; Ashton quarter sacks, 72c.

BALED HAY AND STRAW.—Timothy in car lots is quoted as follows, ℔ ton: Prime No. 1, $11; do. No. 2, $10; do. No. 3, $9@9 50; mixed, $7@8 50; clover, $6@7. Straw, $5@5 25. These pricesare from first hands.

POTATOES.—Market weaker under considerable receipts by teams. State Burbanks quoted at 80@85c in car lots, and Beauty of Hebron at 90c. Store lots are 5c higher. Canadian Early Rose selling at 95c ℔ bu.

ONIONS.—In good demand at $1 10@1 20 ℔ bu. Stocks light.

POP CORN.—Quoted at 2@3c ℔ lb. for old.

HIDES.—Green city, 5c ℔ lb., country 5½@6c; cured, 6¾@7c; green calf, 6@6½c; salted do, 6½@7c; sheep-skins, 50c@$1 25 each; bulls, stag and grubby hides ⅓ off.

APPLES.—Market higher. Prices firm at $2 75@3 25 per bbl., with choice at $3 50.

CRANBERRIES.—Quoted at $3 75@4 ℔ bu. for Jerseys; no others in market.

SWEET POTATOES.—Firm at $5@5 25 ℔ bbl. for kiln-dried Jerseys.

POULTRY.—Dressed quoted as follows: Chickens, ℔ lb., 11@12c; turkeys, 12@12½c; ducks, 12@13c; geese, 9@10c. The market is steady. Receipts are ample, and seem to be increasing.

BUCKWHEAT FLOUR.—Quiet; quoted at $2 50@2 75 for State and $3 00 ℔ cwt. for eastern brands.

CIDER.—Common, 8@9c, and clarified, 10@11c ℔ gal. Market quiet.

DRESSED HOGS.—Receipts light. Most of the receipts go to butchers at $6@6 30 ℔ hundred.

HOPS.—Per lb.: State, nominal; New York, 18@20c; Washington Territory, 15@18c; Bavarian, 24@28c; Bohemian, 26@30c.

PROVISIONS.—Barreled pork has declined 25c ℔ bbl. No other changes. Quotations here are as follows:

Mess, new	14 50	@14 75
Family	14 50	@14 75
Short clear	16 00	@16 25
Lard in tierces, ℔ lb	7⅜@	7⅝
Lard in kegs, ℔ lb	7⅝@	8
Hams, ℔ lb	11 @	11¼
Shoulders, ℔ lb	7½@	7¾
Choice bacon, ℔ lb	10½@	11
Extra mess beef, per bbl	7 00	@ 7 25
Tallow, ℔ lb	3¾@	4

HAY.—The following is a record of the sales at the Michigan Avenue scales for the week up to Friday noon, with price per ton:

Monday—4 loads: Two at $12; one at $12 50 and $11.

Tuesday—20 loads: Six at $10; five at $13; three at $11; two at $12 and $11 50; one at $14 and $12 50.

Wednesday—20 loads: Three at $12 50 and $12; two at $14, $13 50, $13, $11 and $10; one at $13 25, $11 50, $10 50 and $9.

Thursday—42 loads: Nine at $12; eight at $11; seven at $10; five at $12 50; three at $11 50 and $9; two at $14 and $13; one at $13 50, $9 75 and $8.

Friday—21 loads: Nine at $12; three at $11; two at $10 50; one at $14, $13 50, $13, $12 50, $12 25, $11 50 and $9 50.

LIVE STOCK MARKETS.

At the Michigan Central Yards.

Friday, Feb. 24, 1888.

CATTLE.

The offerings of cattle at these yards numbered 450 head, against 361 last week. The market opened up slow, as buyers were looking for lower rates. This sellers were unwilling to concede on the start, but finally they weakened to some entent and a good portion of the receipts changed hands at prices that ranged 10@15 cents lower than those of last week. Several loads for which sellers could not get what they thought they were worth were shipped out in first hands. The following were the closing

QUOTATIONS:

Extra graded steers, weighing 1,300 to 1,450 lbs	$4 60@5 00
Choice steers, fine, fat and well formed, 1,100 to 1,300 lbs	4 15@4 40
Good steers, well fatted, weighing 950 to 1,100 lbs	3 60@4 10
Good mixed butchers' stock—Fat cows, heifers and light steers	3 20@3 50
Coarse mixed butchers' stock—Light thin cows, heifers, stags and bulls	2 50@2 75
Stockers	2 50@2 75
Bulls	2 50@3 25

Clark sold John Robinson a mixed lot of 8 head good butchers' stock av 916 lbs at $3 20.

Brown & Spencer sold John Robinson a mixed lot of 8 head of fair butchers' stock av 973 lbs at $3 10.

C Roe sold John Robinson a mixed lot of 25 head of good butchers' stock av 812 lbs at $3 25 and 3 bulls av 1,133 lbs at $2 60.

McQuillan sold R Caplis a mixed lot of 7 head of good butchers' stock av 893 lbs at $3 25, and a bull to Reagan weighing 680 lbs at $2 25.

Corwin sold John Robinson a mixed lot of 5 head of fair butchers' stock av 546 lbs at $3.

J B Rowe sold John Robinson a mixed lot of 18 head of fair butchers' stock av 926 lbs at $3 05.

Sutton sold Brooka 8 fair shipping steers av 1,348 lbs at $4 05 and 2 good cows av 1,025 lbs at $3 25.

J B Rowe sold John Robinson 5 coarse cows av 1,034 lbs at $2 25.

Stevenson sold John Robinson a mixed lot of 5 head of fair butchers' stock av 830 lbs at $3 05.

Judson sold Phillips & Wreford 9 fair butchers' steers and heifers av 1,034 lbs at $3 45 and 2 thin cows av 1,085 lbs at $2 60.

Hauser sold Cross a mixed lot of 7 head of fair butchers' stock av 840 lbs at $3, and a bull weighing 1,020 lbs at $2 75.

Stage sold Sullivan & F 9 good butchers' steers av 1,080 lbs at $3 75 and a mixed lot of 14 head of fair butchers' stock av 795 lbs at $3 10.

Stabler sold Sullivan & F 3 good cows av 1,233 lbs at $3 40.

Stevenson sold Sullivan & F a choice shipping steer weighing 1,520 lbs at $5; 5 fair ones av 1,144 lbs at $3 70 and a bull weighing 2,260 lbs at $3 75.

Stabler sold Sullivan & F 18 fair shipping steers av 1,244 lbs at $3 75 and 2 bulls av 1,120 lbs at $3.

C Roe sold Sullivan & F 4 good shipping steers av 1,280 lbs at $4 25; a mixed lot of 15 head of good butchers' stock av 990 lbs at $3 25, and 4 thin ones av 887 lbs at $2 60.

SHEEP.

The offerings of sheep numbered 1,143 head, against 986 last week. The demand for sheep was very active for shipment, and prices were a strong 25 cents per hundred higher than those of last week. The dispatches received from Buffalo were unfavorable, but they did not reach here until all the sheep had changed hands. Had there been any left, lower prices would have prevailed.

Stabler sold Judson 101 av 90 lbs at $4 70.

Silsby sold Allen 71 lambs av 79 lbs at $6.

C Roe sold John Robinson 55 av 77 lbs at $4.

Brown & Spencer sold John Robinson 75, part lambs, av 82 lbs at $5.

Silsby sold Allen 82 av 101 lbs at $5 25.

Sutton sold Judson 190 av 107 lbs at $5 35.

Giddings sold Allen 23 av 97 lbs at $5.

Allen sold Monahan 23 lambs av 51 lbs at $4 85.

Stevenson sold John Robinson 12 av 84 lbs at $4 25 and 15 lambs av 64 lbs at $5.

Hauser sold Burt Spencer 125 av 93 lbs at $4 75 and 69 lambs av 88 lbs at $6.

HOGS.

The offerings of hogs numbered 755 head, against 962 last week. Webb Bros who have been out of the market for several weeks made their appearance again, and this helped matters to some extent. The dressed hog season is now over and they will be in the market for the future. The quality of the hogs offered were not very good, but they sold readily at prices that did not average more than 5@10 cents lower than those of last week.

Harwood sold Webb Bros 40 av 172 lbs at $5 20.

C Roe sold Webb Bros 49 av 165 lbs at $5 20.

Giddings sold Webb Bros 54 av 133 lbs at $5 20.

McQuillan sold Bigley 38 av 184 lbs at $5 25.

Hauser sold Webb Bros 34 av 151 lbs at $5 25 and 9 to Monahan av 87 lbs at $5.

Judson sold Bigley 35 av 162 lbs at $5 25.

Harwood sold Webb Bros 39 av 144 lbs at $5 20.

O'Hara sold Webb Bros 51 av 193 lbs at $5 20.

King's Yards.

Friday, Feb. 24, 1888.

CATTLE.

The market opened up at these yards with 758 head of cattle on sale. The demand was active but prices ranged 10@15 cents lower. The dressed beef trade has been slow for the past week, and this will account for the decline in prices. All the cattle offered changed hands and the market closed steady at the decline.

Bell sold Billkofski 7 good butchers' steers av 1,000 lbs at $3 60.

Hogan sold Knoch 4 good butchers' steers av 1,152 lbs at $3 80 and 4 to Kraft av 946 lbs at $3 60.

Bird sold Wreford & Beck 3 good butchers' steers av 996 lbs at $3 75 and 6 fair ones av 986 lbs at $3 50.

Standlick sold Loosemore a mixed lot of 10 head of good butchers' stock av 928 lbs at $3 25.

Hall sold Genther 2 choice butchers' steers av 1,025 lbs at $4 and a mixed lot of 12 head of fair butchers' stock to Geo Wreford av 990 lbs at $3 15.

Evans sold Sullivan & F 3 good butchers' steers av 1,119 lbs at $3 80; a mixed lot of 11 head of fair butchers' stock to Murphy av 757 lbs at $3, and a bull weighing 720 lbs at $2 50.

Rich [illegible] sold McIntire a mixed lot of 14 head of fair butchers' stock av 816 lbs at $3.

Campbell sold Caplis a mixed lot of 12 head of fair butchers' stock av 910 lbs at $3 and a bull weighing 1 280 lbs at $2 50.

Shook sold Sullivan & F 4 stockers av 737 lbs at $2 85.

Walls sold Loosemore a mixed lot of 24 head of fair butchers' stock av 824 lbs at $3 10.

Haley sold Genther 2 choice butchers' steers av 960 lbs at $4 and 7 fair ones to Mason av 844 lbs at $3 50.

Grant sold Sullivan & F 4 good butchers' steers av 965 lbs at $3 85 and a mixed lot of 13 head of good butchers' stock to Flieschman av 974 lbs at $3 25.

Bird sold J Wreford 8 fair butchers' steers and heifers av 846 lbs at $3 30 and a mixed lot of 5 head of fair butchers' stock to Murphy av 702 lbs at $3 10.

Hawthorne sold Wreford & Beck 8 good butchers' steers av 980 lbs at $3 60.

Stottles sold Sullivan & F a mixed lot of 25 head of fair butchers' stock av 812 lbs at $3.

Robb sold Kelly a mixed lot of 5 head of fair butchers' stock av 716 lbs at $2 80.

Page sold Kolb 8 fair butchers' steers av 1,075 lbs at $3 50.

Newton sold Sullivan & F 2 choice butchers' steers av 1,110 lbs at $4 12½ and a mixed lot of 5 head of good butchers' stock to Wreford & Beck av 1,086 lbs at $3 20.

Harris sold Marx 10 fair butchers' steers av 1,096 lbs at $3 50.

McHugh sold Wreford & Beck 10 good butchers' steers av 1,177 lbs at $3 80.

Campbell sold Brooka 2 choice butchers' steers av 1,110 lbs at $4 and 3 good ones to Heutter av 920 lbs at $3 60.

Dennis sold Phillips & Wreford a mixed lot of 13 head of fair butchers' stock av 870 lbs $3 and 2 choice oxen to Sullivan & F av 1,825 lbs at $4 25.

Belhimer sold Sullivan & F 14 good butchers' steers av 1,162 lbs at $3 80.

Richmond sold Mason a mixed lot of 5 head of thin butchers' stock av 1,032 lbs at $2 50.

Harris sold Loosemore a mixed lot of 7 head of fair butchers' stock av 844 lbs at $3.

Gleason sold Stonehonse a mixed lot of 18 head of fair butchers' stock av 778 lbs at $2 90.

McHugh sold Sullivan & F 10 feeders av 936 lbs at $2 90.

Long sold Brooka a mixed lot of 10 head of thin butchers' stock av 948 lbs at $2 75.

Purdy sold Kamman a mixed lot of 10 head of good butchers' stock av 895 lbs at $3 40.

Gleason sold McGee a mixed lot of 12 head of thin butchers' stock av 833 lbs at $2 65.

Beach sold Phillips & Wreford a mixed lot of 24 head of fair butchers' stock av 879 lbs at $2 85.

Newton sold Cross a mixed lot of 5 head of fair butchers' stock av 776 lbs at $3.

Church sold J Wreford 4 fair butchers' steers av 930 lbs at $3 50.

Capwell sold Caplis 4 fair cows av 1,112 lbs at $3.

Hogan sold Kamman a mixed lot of 5 head of good butchers' stock av 916 lbs at $3 30.

Lewis sold Sullivan & F a mixed lot of 24 head of fair butchers' stock av 985 lbs at $3.

Gleason sold Bussell a mixed lot of 22 head of good butchers' stock av 908 lbs at $3 30.

Webb sold Wreford & Beck a mixed lot of 20 head of good butchers' stock av 930 lbs at $3 50.

Stevens sold Sullivan & F a mixed lot of 19 head of fair butchers' stock av 903 lbs at $3 15.

Holmes sold Brooka a mixed lot 10 head of fair butchers' stock av 1,055 lbs at $3.

Patton sold Sullivan & F 12 feeders av 920 lbs at $3 25.

Church sold Brooka 14 feeders av 987 lbs at $3 20.

Longcor sold Mason a mixed lot of 4 head of fair butchers' stock av 757 lbs at $3.

Piotts sold Brooka 10 fair shipping steers av 1,186 lbs at $3 70.

D Sullivan sold McGee a mixed lot of 7 head of thin butchers' stock av 815 lbs at $2 75.

Gleason sold Brooka 6 fair butchers' steers a. 1,038 lbs at $3 40.

SHEEP.

The offerings of sheep numbered 1,645 head. The demand for sheep was active and the decline of last week was more than recovered, the receipts selling for the highest prices of the season, taking the quality into consideration.

Pickering sold Church 106, part lambs, av 79 lbs at $5 20.

Brant sold Burt Spencer 57, part lambs, av 84 lbs at $5 25.

McCall sold Burt Spencer 77, part lambs, av 64 lbs at $4 25.

Jones sold Burt Spencer 102 av 90 lbs at $5.

Peach sold Andrews 40 av 90 lbs at $4 75.

Baker sold Burt Spencer 231 lambs av 78 lbs at $5 85.

Simmons sold Burt Spencer 29 av 80 lbs at $4 40.

Baker sold Burt Spencer 73 av 90 lbs at $4 90.

Shook sold Burt Spencer 52 av 74 lbs at $4 25.

Major sold Burt Spencer 95 av 86 lbs at $5.

Lovewell sold Wreford & Beck 65, part lambs, av 77 lbs at $5 15.

McHugh sold Burt Spencer 141 av 100 lbs at $5 25.

Henderson sold Morey 73 av 81 lbs at $4 45.

Purdy sold Morey 32 av 79 lbs at $4 45.

Jacobs sold Andrews 63 lambs av 63 lbs at $5.

Church sold Morey 27 av 89 lbs at $4 50.

HOGS.

The offerings of hogs numbered 640 head. The market ruled fairly active but at prices 10@15 cents lower than those of last week.

Long sold Hayes 24 av 145 lbs at $5 12½.

Bird sold Rauss 70 av 150 lbs at $5 25.

Harger sold R S Webb 28 av 168 lbs at $5 15.

Walls sold R S Webb 13 av 118 lbs at $5.

Robb sold Rauss 31 av 193 lbs at $5 30.

Hawley sold R S Webb 8 av 175 lbs at $5 10.

Adams sold R S Webb 23 av 123 lbs at $5.

Plotts sold Rauss 10 av 170 lbs at $5 35.

Beach sold R S Webb 60 av 154 lbs at $5 15.

Little sold Hayes 31 av 129 lbs at $5 10.

Webb sold Rauss 18 av 152 lbs at $5 20.

Holmes sold Rauss 46 av 179 lbs at $5 30.

Purdy sold Rauss 55 av 211 lbs at $5 30.

Church sold Rauss 72 av 193 lbs at $5 20.

Haley sold R S Webb 43 av 154 lbs at $5 25.

Gleason sold R S Webb 33 av 149 lbs at $5 10.

Longcor sold R S Webb 44 av 166 lbs at $5 20.

Powers sold Rauss 17 av 176 lbs at $5 20.

Buffalo.

CATTLE.—Receipts 12,563 against 8,500 the previous week. The market opened up on Monday with 155 car loads on sale. The demand was inactive from all parts, Boston buyers being entirely out of the market and New York buyers taking only a very few, while all grades were 10@15 cents lower than on Monday week. Good 1,500 to 1,600 lb steers, $5@5 25; good 1,400 to 1,500 lb do, $4 75@5; good 1,300 to 1,400 lb do, $4 50@4 75; good 1,200 to 1,300 lb do, $4 25@4 50; good 1,100 to 1,200 lb do, $3 85@4 35; good 1,000 to 1,100 lb do, $3 40@3 90; cows and heifers and mixed butchers, $3@3 50 to $3 75 if choice. There were no fresh receipts on Tuesday, and 12 loads of common stuff left over sold out at weak prices. On Wednesday and Thursnay the supply was light. The market ruled steady at about Monday's rates. On Friday the receipts were light, the market dull and and weak, closing at the following

QUOTATIONS:

Extra Beeves—Graded steers, weighing 1,300 to 1,450 lbs	5 00@5 25
Choice Beeves—Fine, fat, well-formed steers, weighing 1,300 to 1,400 lbs	4 50@4 75
Good beeves—Well-fattened steers weighing 1,200 to 1,350	4 25@4 50
Medium Grades—Steers in fine flesh, weighing 1,100 to 1,200 lbs	3 85@4 35
Light Butchers'—Steers averaging 1000 to 1,100 lbs, of fair to good quality	3 40@3 90
Butchers' Stock—Inferior to common steers and heifers, for city slaughter, weighing 900 to 1,000 lbs	2 75@3 50
Michigan stock cattle, common to choice	2 25@3 00
Michigan feeders, fair to choice	2 90@3 10
Fat bulls, fair to extra	2 75@3 50

SHEEP.—Receipts 26,600 against 33,600, the previous week. There were about 12,000 sheep on sale Monday. The market opened dull; but in the afternoon there was a fairly active demand at about the prices of Saturday. Common to fair sheep, $4 50@5; fair to medium, $5@5 25; medium to good, $5 25@5 50; good to choice, $5 50@5 75; lambs were dull and heavy; inferior to common, $4 50@5; ordinary to fair, $5 50@6; medium to good, $6 25@6 60; choice to extra, $6 75@7; quite a large number were left over. There were no sheep received on Tuesday and those held over were closed out at full former prices. There were about 4,000 on sale Wednesday. For good to choice sheep the market was active, while commod were dull and lower. There was no change on Thursday. On Friday the sheep market was dull, and prices 10@15 cents lower. Inferior to fair sold at $3 75@4 75; good to choice, $5@5 50; extra, $5 75; lambs, good to choice, firm at $6 25@6 75; common, dull

HOGS.—Receipts 49,491, against 40,482 the previous week. The offerings of hogs on Monday numbered 9,400. The demand was active and the bulk were closed out at full Saturday's prices. Pigs sold at $4 90@5 05; mixed pigs and light Yorkers, $5 10@5 20; selected Yorkers, $5 25@5 40 for light to best; selected medium weights, $5 55@5 65; good heavy, $5 85; but with a deck of extra selected av 315 lbs at $6; rough, $4 75@5 10; stags, $4. There were 8 loads on sale Tuesday. There was a fair demand and prices averaged about the same as the day before. For light weights the market was 5 cents better on Wednesday, other grades unchanged; but advance was lost on Thursday and the market was weak. On Friday the receipts numbered 5,400. The demand was active and the market firm. Good to choice Yorkers sold at $5 35@5 45; fair do, $5 20@5 30; selected medium weights, $5 65@5 75, bulk at $5 70; rough ends, $4 80@5

Chicago.

CATTLE.—Receipts, 32,426 against 30,892 week. Shipments 9,773. The receipts of cattle on Monday numbered 7,806 head. The market for good to fancy cattle was 5@10 cents higher than on Saturday and other grades steady. The best on sale brought $5 20. That price was obtained for 101 head av 1,524 lbs. Forty steers av less than 1,400 lbs sold at $5 15. Eastern shippers and exporters bought freely at $3 60@5 20, principally at $4 20@4 90. Dressed-beef men were the principal buyers at $2 85@4 55, largely at $3 80@4 35 for medium to good 1,060 to 1,340 lb steers. Some 1,257 lb cows sold at $3 40 and a car load of 1,335 lb stags sold at $3 35. The market declined 10 cents on Tuesday and closed weak. On Wednesday there was a decline of 10@15 cents, although the receipts were less than 9,000 head, but on Thursday a part of this was recovered. On Friday the receipts numbered 6,000 head. The market was active, and good grades stronger. The following were the closing

QUOTATIONS:

Fancy 1,500 to 1,800 lbs	5 20@5 50
Good to choice 1,300 to 1,550 lbs	4 40@5 15
Medium to good ,1,100 to 1,250	3 60@4 45
Common steers	2 75@3 45
Fancy native cows and heifers	2 80@3 15
Common to choice cows, 850 to 1,100 lbs	1 90@2 75
Poor to best bulls, 900 to 1.800 lbs	2 10@2 90
Stock steers, 500 to 900	2 35@2 75

HOGS.—Receipts 68,117 against 82,879 last week. Shipments 22,231. There were 18,708 hogs received on Monday and with the "stale" hogs made quite a supply. The demand was active and sales were made at full Saturpay's prices. Poor to prime light sold at $4 90@5 30; inferior mixed to choice heavy, $5 05@5 70; skips and culls, $3 25@4 80. The receipts were light on Tuesday and the market steady. Prices declined 5@10 cents on Wednesday and on Thursday all outside of the best lots were 5 cents lower. On Friday the demand was fairly active and the market steady, closing with poor to prime light selling at $4 90@5 35; inferior mixed to choice heavy, $5 10@5 65; skips and culls, $3 30@4 65.

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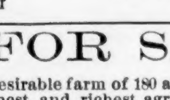

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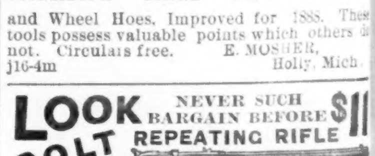

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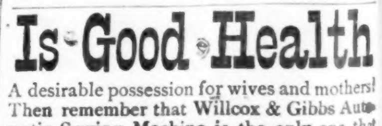

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